=> fil req

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STRUCTURE FILE UPDATES: 22 APR 2009 HIGHEST RN 1138219-76-7
DICTIONARY FILE UPDATES: 22 APR 2009 HIGHEST RN 1138219-76-7

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http://www.cas.org/support/stngen/stndoc/properties.html

=> d que

L5 STR

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 10

STEREO ATTRIBUTES: NONE

L13 20368 SEA FILE=REGISTRY SSS FUL L5 L15 STR

cH2=c~3=2~g

VAR G1=T-BU/S-BU/I-BU/N-BU NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM

10/534,196

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 6

STEREO	ATTRIBUT	ES: NONE
L17	3984	SEA FILE=REGISTRY SUB=L13 SSS FUL L15
L18		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L17
L19		OUE SPE=ON ABB=ON PLU=ON FABRIC? OR TEXTIL? OR FIBER?
		OR FIBRE? OR FIBROUS?
L20	1618	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L18(L)PREP/RL
L21		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L20 AND L19
L23		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON SURFACTANTS+PFT,NT
		/CT
L24	245	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L20 AND L23
L25		QUE SPE=ON ABB=ON PLU=ON (BLOCK? OR GRAFT? OR STAR? O
		R BRANCH?) (5A) COPOLYMER?
L26	17	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND L25
L27		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND L25
L28		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND ZWITTERIO
		N?
L29		OUE SPE=ON ABB=ON PLU=ON ANTIWRINK? OR CREASEPROOF?
		OR CREASE PROOF? OR LAUNDER? OR CLEANSING? OR (HAIR? O
		R SKIN) (3A) (TREAT? OR PROTECT?)
L30	2	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND L29
L31		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND L29
L32		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L20 AND L29
L33		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L26 OR L28 OR
=		(L30 OR L31 OR L32)
L35	13	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L33 AND (1840-2002
)/PRY,AY,PY
L36	10	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L21 AND POLYMER?/S
		C, SX
L37	37	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L24 AND POLYMER?/S
		C, SX
L38	46	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L36 OR L37
L39		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L38 AND (1840-2002
)/PRY,AY,PY
L41	1	SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 3637-26-1/RN
L42		SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON 3637-26-1/CRN
L43	96	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L41
L44	299	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L42
L45	0	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L43 OR L44) AND
		L39
L46	60	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L43 OR L44) AND
		L18
L47	5	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L46 AND L19
L48		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L46 AND L29
L49		SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON (L47 OR L48) AND
	_	(1840-2002)/PRY,AY,PY
L50	49	SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L35 OR L39 OR L45
		OR L49

^{=&}gt; fil hcap

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FILE COVERS 1907 - 24 Apr 2009 VOL 150 ISS 18 FILE LAST UPDATED: 23 Apr 2009 (20090423/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 150 1-49 ibib ed abs hitstr hitind

L50 ANSWER 1 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:430848 HCAPLUS Full-text

DOCUMENT NUMBER: 140:424122

TITLE: Controlled-structure copolymer comprising an

amphoteric or zwitterionic part

INVENTOR(S): Destarac, Mathias
PATENT ASSIGNEE(S): Rhodia Chimie, Fr.

SOURCE: PCT Int. Appl., 28 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	ENT 1	. OV			KIN	D	DATE		i				NO.		Di	ATE
		0440			A1	-	2004	0527	1	WO 2	003-				2	0031031
	W:	CN,	co,	CR,	CU,	CZ,	AU, DE, HU,	DK,	DM,	DZ,	BG, EC,	BR, EE,	EG,	ES,	FI,	GB,
		MZ, SK,	NI, SL,	NO,	NZ, TJ,	OM,	LT, PG, TN,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,
	RW:	BW, AZ, DK,	GH, BY, EE,	GM, KG, ES,	KE, KZ, FI,	MD, FR,	MW, RU, GB, BJ,	TJ, GR,	TM, HU,	AT, IE,	BE, IT,	BG, LU,	CH, MC,	CY, NL,	CZ, PT,	DE, RO,
FR 2	28469				TD, A1		2004	0514	1	FR 2			0		2	0021107
FR 2	28469	973			В1		2004	1217			<-					

FR	2859209	A1	20050304	FR 2003-10292	20030829
FR	2859209	B1	20071130		
	2003292304	A1		AU 2003-292304	20031031
AU	2003292304	AI	20040603	AU 2003-292304	20031031
				<	
EP	1558658	A1	20050803	EP 2003-767870	20031031
	1550000	***	2000000	Z- 2005 TOTOTO	20031031
				<	
	R: AT, BE, CH,	DE,	DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC,
	PT. TE. ST.	LT.	LV. FT. RO.	MK, CY, AL, TR, BG,	CZ. EE. HU. SK
DD				BR 2003-16048	
BR	2003016048	A	20050913		20031031
				<	
.TP	2006505686	T	20060216	JP 2005-506660	20031031
	=00000000			<	20002002
US	20060217285	A1	20060928	US 2005-534196	20050506
				<	
DD TOD TES					3 00001100
PRIORITI	APPLN. INFO.:			FR 2002-13950	A 20021107
				<	
				FR 2003-10292	A 20030829
				FR 2005-10292	A 20030023
				WO 2002 ED22EE	W 20031031
				WO 2003-FR3255	W 20031031

ED Entered STN: 27 May 2004

AB The invention concerns a controlled structure polymer comprising at least two different parts: a first part A which is amphoteric or zwitterionic, including anionic or potentially anionic units, and cationic or potentially cationic units, or zwitterionic units, and another part B which is not amphoteric or zwitterionic. Said copolymer exhibits a high potential of adaptation, through variation of its composition, in order to improve the properties of compns. in which it is introduced. A typical copolymer was manufactured by radical polymerization of 65 g Bu acrylate in EtOH in the presence of O-ethyl-S-[1-(methoxycarbonyl)ethyl]xanthate at 70°, and radical polymerization of 173.4 g acrylic acid and 404.7 g 2-acryloyloxyethyltrimethylammonium Me sulfate in the presence of the resulting polymer in EtOH.

691355-68-7P, Acrylic acid-2-acryloyloxyethyltrimethylammonium methyl sulfate-butyl acrylate block copolymer

(controlled-structure copolymer comprising an amphoteric or zwitterionic part)

RN 691355-68-7 HCAPLUS

Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, methyl CN sulfate, polymer with butyl 2-propenoate and 2-propenoic acid, block (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

n-Buo-C-CH-CH2

CM

CRN 79-10-7

CMF C3 H4 O2



CM 13106-44-0 CMF C8 H16 N O2 . C H3 O4 S CM 4 CRN 21228-90-0 CMF C H3 O4 S

Me-0-803-

CM 5 CRN 20284-80-4 CMF C8 H16 N 02

IC ICM C08F293-00

ICS C11D001-88; A61K007-075; C11D003-37; A61K007-02; A61K007-06

- CC 35-8 (Chemistry of Synthetic High Polymers)
- ST block copolymer amphoteric zwitterionic;

butyl acrylate acrylic acid acryloyloxyethyltrimethylammonium methosulfate block copolymer manuf

IT Polyelectrolytes
 (amphoteric; controlled-structure copolymer comprising an
 amphoteric or zwitterionic part)

IT Hair preparations

(conditioners; controlled-structure copolymer comprising an amphoteric or zwitterionic part for hair conditioners)

IT Cosmetics

(conditioners; controlled-structure copolymer comprising an amphoteric or zwittexionic part for skin conditioners)

IT Detergents

(controlled-structure copolymer comprising an amphoteric or zwitterionic part for detergents)

IT Quaternary ammonium compounds, preparation

(polymers; controlled-structure copolymer comprising an amphoteric or zwitterionic part)

IT Zwitterions

(polymers; controlled-structure copolymer comprising an amphoteric

10/534,196

or zwitterionic part for hair conditioners)

IT Polymerization

(radical; of unsatd. monomers for manufacture of controlled-structure copolymer comprising an amphoteric or zwitterionic part)

IT 691355-68-7P, Acrylic acid-2-acryloyloxyethyltrimethylammonium

methyl sulfate-butyl acrylate block copolymer
(controlled-structure copolymer comprising an amphoteric

or zwitterionic part)

9003-49-0P, Polybutyl acrylate

(copolymer precursor; controlled-structure copolymer comprising an amphoteric or zwitterionic part)

amphoteric or zwitterion REFERENCE COUNT: 7 T

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:390970 HCAPLUS Full-text

DOCUMENT NUMBER: 140:408665

TITLE: Antiwrinkling composition comprising a

controlled-architecture copolymer for treatment of

textile articles after laundering
INVENTOR(S): Harrison, Ian; Destarac, Mathias; Geffroy, Cedric

PATENT ASSIGNEE(S): Rhodia Chimie, Fr.

SOURCE: Fr. Demande, 36 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATEN					KIN	D	DATE			APPL					D	ATE
FR 28					A1	_	2004				002-				2	0021107
FR 28 WO 20										WO 2	003-		83		2	0031027
		CN, GD, KZ, MZ, SK, YU, GH, BY, EE,	CO, GE, LC, NI, SL, ZA, GM, KG, ES, SK,	CR, GH, LK, NO, SY, ZM, KE, KZ, FI, TR,	CU, GM, LR, NZ, TJ, ZW LS, MD, FR, BF,	CZ, HR, LS, OM, TM, MW, RU, GB,	AU, DE, HU, LT, PG, TN, MZ, TJ, GR, CF,	DK, ID, LU, PH, TR, SD, TM, HU,	DM, IL, LV, PL, TT, SL, AT, IE,	DZ, IN, MA, PT, TZ, SZ, BE, IT,	BG, EC, IS, MD, RO, UA, TZ, BG, LU,	BR, EE, JP, MG, RU, UG, CH, MC,	EG, KE, MK, SC, US, ZM, CY, NL,	ES, KG, MN, SD, UZ, ZW, CZ, PT,	FI, KP, MW, SE, VC, AM, DE, RO,	GB, KR, MX, SG, VN, AZ, DK, SE,
AU 20	032			TD,			2004	0603	1	AU 2	003-	2854	65		2	0031027
EP 15	581	720			A1		2005	0803	1	EP 2	003-	 7784	66		2	0031027
R							ES,									MC, HU, SK
JP 20	065	5057	09		Т		2006	0216		JP 2		5510	82		2	0031027
JP 41 WO 20											003-		55		2	0031031

		CN, GD, KZ, MZ, SK, YU,	CO, GE, LC, NI, SL, ZA,	CR, GH, LK, NO, SY, ZM,	CU, GM, LR, NZ, TJ, ZW	CZ, HR, LS, OM, TM,	DE, HU, LT, PG, TN,	DK, ID, LU, PH, TR,	DM, IL, LV, PL, TT,	DZ IN MA PT TZ	, BG, , EC, , IS, , MD, , RO, , UA,	EE, JP, MG, RU, UG,	EG, KE, MK, SC, US,	ES, KG, MN, SD, UZ,	FI, KP, MW, SE, VC,	GB, KR, MX, SG, VN,	
	RW:										, SZ,						
											, BE,						
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							ы,	CF,	CG,	CI.	, CM,	GA,	GN,	GQ,	GW,	ML,	
2.77	2002				TD,		0004	0000			0000					00010	2.1
AU	2003	2923	04		MI		2004	0003		AU .	2003-	2923 	04		- 4	00310	31
EP	1558	658			A1		2005	0803	1	EP :	2003-	7678	70		2	00310	31
	ъ.	7. m	D.D.	on	D.F.	DI	no.	En	OB	on			T 11	NIT	O.F.	140	
	K:										, IT,						CV
DD.	2003				A			0913			2003-			04,		00310	
DI	2005	0100	***		**		2005	0313		DIC .					-	00310	-
CN	1735	636			A		2006	0215	•	CN :	2003-		8414		2	00310	31
.TD	2006	5056	86		т		2006	0216		TD .	2005-		60		2	00310	31
01	2000	3030	00		1		2000	0210		, .			00		-	00310	
US	2006	0217	285		A1		2006	0928	1	US :	2005-		96		2	00505	06
											<						
US	2007	0094	809		A1		2007	0503	1	US :	2006-	5341 	97		2	00604	13
IIS	7378	033			B2		2008	0527									
PRIORIT			INFO	. :					1	FR :	2002-	1395	0		A 2	00211	07
									1	FR :	2003-	1029	2		A 2	00308	29
									1	NO :	2003-	FR31	83		W 2	00310	27
									1	NO :	2003-	FR32	55		W 2	00310	31

ED Entered STN: 14 May 2004

AB Antiwrinkling agents for treatment of textile articles after laundering are based on aqueous or aqueous alc. compns. containing a cationic surfactant and a polymer having (A) 21 nonionic hydrophobic block and (B) ≥1 ionic or ionizable block [B/A = (0.01-0.1):1] that is compatible with the cationic surfactant at the pH of mixing and utilization. A typical block copolymer was manufactured by radical polymerization of Bu acrylate in the presence of 0-ethyl-S-[1-(methoxycarbonyl)ethyl] xanthate, and radical polymerization of 2-dimethylaminoethyl acrylate in the presence of the resulting poly(Bu acrylate).

IT 281198-01-4P, Butyl acrylate-2-dimethylaminoethyl acrylate block copolymer 363619-87-8P 688811-07-69

(antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundering)

RN 281198-01-4 HCAPLUS

N 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 2439-35-2

CMF C7 H13 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

RN 363619-87-8 HCAPLUS

CN Ethanaminium, N,N,N-trimethy1-2-[(1-oxo-2-propeny1)oxy]-, methy1 sulfate, polymer with buty1 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 13106-44-0 CMF C8 H16 N O2 . C H3 O4 S

CM 3

CRN 21228-90-0 CMF C H3 O4 S

Me-0-803-

CM 4

CRN 20284-80-4

CMF C8 H16 N O2

RN 688811-07-6 HCAPLUS

CN Ethanaminium, N,N,N-trimethy1-2-[(1-oxo-2-propeny1)oxy]-, methy1 sulfate, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 79-10-7

CMF C3 H4 O2

CM 3

CRN 13106-44-0

CMF C8 H16 N O2 . C H3 O4 S

CM 4

CRN 21228-90-0 CMF C H3 O4 S

Me-0-503-

CM 5

CRN 20284-80-4 CMF C8 H16 N O2

Me3*N_CH2_CH2_O_0_CH__CH__CH2

IC ICM C11D003-37

ICS C08F293-00; C11D001-38

CC 46-5 (Surface Active Agents and Detergents)

ST antiwrinkling agent cationic surfactant hydrophobic ionic combination block copolymer; textile laundering sntiwrinkling agent; butyl acrylate dimethylaminoethyl acrylate block copolymer

antiwrinkling agent

IT Creaseproofing

(agents; antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundering)

IT Laundering

(antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundaring)

Surfactants

(cationic; antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundering)

IT Ouaternary ammonium compounds, uses

(dimethylditallow alkyl, chlorides; antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundering)

IT Quaternary ammonium compounds, uses

(polymers; antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundering)

IT 281198-01-4P, Butyl acrylate-2-dimethylaminoethyl acrylate block copolymer 363619-87-8P 688811-07-69

(antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundering)

9003-49-0P, Polybutyl acrylate 33114-26-0P

(block polymer precursor; antiwrinkling compns. containing a polymers having hydrophobic blocks and ionic/ionizable blocks for treatment of textile articles after laundering)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:269902 HCAPLUS Full-text DOCUMENT NUMBER: 140:287869

TITLE: Ion triggerable, cationic polymers, their manufacture and use in wipe items

INVENTOR(S): Bunyard, W. Clayton; Branham, Kelly D.; Lostocco,
Michael R.; Calhoun, Glenn; Weston, Rod; Land,

10/534,196

Frederick J.; Possell, Kevin

PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA SOURCE: U.S. Pat. Appl. Publ., 36 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	TENT :	NO.			KIN	_	DATE			APPL	ICAT	ION I	NO.		D.	ATE
US	2004	0063	888				2004	0401		US 2		2516	56		2	0020920
US	7141	519			B2		2006	1128								
WO	2004	0269	58		A1		2004	0401		WO 2			512		2	0030523
						3 m							D.1.			011
	w:										BG,					
											EC,					
											JP,					
											MG,					
											SC,					
											VC,					
	RW:										TZ,					
											BG,					
											LU,					
						BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,
			SN,												_	
AU	2003	2282	62		AI		2004	0408		AU Z			62		2	0030523
nn.	1520	000			3.1		2005	0015		nn 2			c 1		2	0020522
EP	1539	880			AI		2005	0013		EP Z		12691	0.1			0030523
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	R:															HU, SK
DD	2002															0030523
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MX	2005	0025	0.1		Α		2005	0527		MY 2					2	0050304
	2000	0020	~ -												-	0000001
ידדקו	Y APP	T.N	TNEO							IIS 2			56		Δ 2	0020920
,															-	
										WO 2			512	1	W 2	0030523

ED Entered STN: 02 Apr 2004

AB The title binder copolymers having ammonium groups are applied to fiber-containing fabrics and webs for personal care products, such as wet wipes. A cationic polymer binder was prepared from 39.6 g Adamquat MC-80 and 2267.7 g Me acrylate in acetone in the presence of Vazo 52.

IT 36347-54-3P, Ethanaminium,

N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate 113673-28-2P, Ethanaminium, N,N-trimethyl-2-((2-methyl-1-oxo-2-propenyl)oxyl-, chloride, polymer

with butyl 2-propenoate and methyl 2-propenoate

(ion triggerable cationic polymers for wet wipes)

RN 36347-54-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . C1

10/534,196

● c1-

CM 2

CRN 141-32-2 CMF C7 H12 O2

RN 113673-28-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate (9C1) (CA INDEX NAME)

CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . C1

● c1 -

CM 2

CRN 141-32-2 CMF C7 H12 O2

ů.

CM 3

```
CRN 96-33-3
CMF C4 H6 O2
```



IC ICM C08F012-28

INCL 526310000

35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 43, 62

Polyolefin fibers

(ethylene; ion triggerable cationic polymers for wet wipes) Wood

ΙT

(fibers; ion triggerable cationic polymers for wet wipes)

Binders

Cellulose pulp Cosmetics

Nonwoven fabrics

Wipes

(ion triggerable cationic polymers for wet wipes)

IT Polvester fibers, uses

(ion triggerable cationic polymers for wet wipes)

36347-54-3P, Ethanaminium,

N, N, N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate 113673-28-2P, Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate 116076-06-3P,

Ethanaminium, N, N, N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with methyl 2-propenoate 220557-78-8P,

Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride. polymer with methyl 2-propenoate 673496-25-8P 673496-26-9P 673496-28-1P

(ion triggerable cationic polymers for wet wipes)

199 THERE ARE 199 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN 2004:252158 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 140:292223

TITLE . Ion triggerable cationic polymers for wet wipes INVENTOR(S): Branham, Kelly D.; Bunyard, W. Clayton; Lang,

Frederick J.; Possell, Kevin; Lostocco, Michael R. PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA

SOURCE: U.S. Pat. Appl. Publ., 34 pp.

CODEN: USXXCO

DOCUMENT TYPE: Pat.ent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE US 20040058606 A1 20040325 US 2002-251610 20020920 <--

10/534,196

	US	7157	389			B2		2007	0102								
	WO	2004	0263	54		A1		2004	0401		WO	2003-	JS28	244		2	0030908
		W:										, BG,					
												, EC,					
												, IS,					
												, MD,					
												, RO,					
				ZM,		TJ,	TM,	TN,	TR,	TT,	TZ	, UA,	UG,	UZ,	vc,	VN,	YU,
		DM.				T.C	3.67.7	1477	CD	CT	C7	, TZ,	TIC	734	77.147	234	3.77
		Ew.										, 12, , BG,					
												, LU,					
												, GA,					
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	AII	2003				A1		2004	0408		AII	2003-	2660	0.8		2	0030908
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	AU	2003	2660	08		B2		2008	0703								
	EP	1539	259			A1		2005	0615		EP	2003-	7978	91		2	0030908
												<-					
	EP	1539				B1		2007									
		R:										, IT,					
															CZ,		HU, SK
	BR	2003	0140	54		A		2005	0705		BR	2003-		4		2	0030908
		1601	F 2.0					0005	1010					2.0		_	0020000
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	CNI	1003	0205	,		С		2008	0.422			<.					
		2006				Т		2006			TD	2004-	5377	5.1		2	0030908
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	ZA	2005	0019	27		A		2006	0531		ZA	2005-				2	0050101
	MX	2005	0024	32		Α		2005	0816		MX	2005-	2432			2	0050303
												<-					
	US	2007	0010	155		A1		2007	0111		US	2006-	5201	69		2	0060912
												<-					
		7456				B2		2008	1125								
PRIO	RITY	APP:	LN.	INFO	. :						US			10	- 2	A 2	0020920
											WO	2003-	US28.	244	1	N 2	0030908

ED Entered STN: 26 Mar 2004

AB The present invention is directed to ion triggerable, water-dispersible cationic polymers. The present invention is also directed to a method of making ion triggerable, water-dispersible cationic polymers and their applicability as binder compns. The present invention is further directed to fiber-containing fabrics and webs comprising ion triggerable, water-dispersible binder compns. and their applicability in water-dispersible personal care products, such as wet wipes. A cationic polymer binder was prepd from Adamquat MC-30 and Me acrylate.

N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate 113673-28-2P, Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate

(ion triggerable cationic polymers for wet wipes)

IT 36347-54-3P, Ethanaminium,

RN 36347-54-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate (CA INDEX NAME)

```
CM 1
    CRN 5039-78-1
    CMF C9 H18 N O2 . C1
                  0 CH<sub>2</sub>
Me3+N-CH2-CH2-O-C-C-Me
          ● c1-
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
 n-Buo-Ŭ-CH-CH2
RN
    113673-28-2 HCAPLUS
CN
   Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
    chloride, polymer with butyl 2-propenoate and methyl 2-propenoate
    (9CI) (CA INDEX NAME)
    CM 1
    CRN 5039-78-1
    CMF C9 H18 N O2 . C1
                  o CH<sub>2</sub>
          € c1 -
    CM 2
    CRN 141-32-2
    CMF C7 H12 O2
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п-вио_0_Сн__сн_

CM 3

CRN 96-33-3 CMF C4 H6 O2

Men_C_CH_CH2

IC ICM B32B005-02

INCL 442327000

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 35, 38, 63 36347-54-3P, Ethanaminium,

N, N, N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer-polwith butyl 2-propenoate 113673-28-2P, Ethanaminium, N, N, N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate 116076-06-3P, Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with methyl 2-propenoate 220557-78-8P, Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride. polymer with methyl 2-propenoate 673496-25-8P 673496-26-9P

673496-28-1P

(ion triggerable cationic polymers for wet wipes)

REFERENCE COUNT: 199 THERE ARE 199 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN 2004:250691 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 140:276247

TITLE: Water-dispersible personal care products

containing ion-triggerable cationic polymers as binders

INVENTOR(S):

Bunyard, W. Clayton; Branham, Kelly D.; Lostocco, Michael R.; Lang, Frederick J.; Possell, Kevin

PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA

U.S. Pat. Appl. Publ., 35 pp. SOURCE:

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
US 20040055704	A1 20040325	US 2002-251692	20020920
		<	
US 7101456	B2 20060905		
WO 2004026352	A1 20040401	WO 2003-US16513	20030523
		<	
W: AE, AG, A	L, AM, AT, AU, AZ,	BA, BB, BG, BR, BY, BZ,	CA, CH,

CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,

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LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
            NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,
            TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
            EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
            SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
            NE, SN, TD, TG
    AU 2003233689
                         A1
                               20040408
                                           AU 2003-233689
                                                                  20030523
                                                  <--
                                                                  20050302
    MX 2005002397
                        A 20050527
                                           MX 2005-2397
PRIORITY APPLN. INFO.:
                                           US 2002-251692
                                                              A 20020920
                                                  <--
                                           WO 2003-US16513
                                                             W 20030523
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ED Entered STN: 26 Mar 2004

AB The present invention is directed to water-dispersible cationic polymers whose tensile strength is ion-concentration sensitive, or called ion-triggerable hereafter. The present invention is also directed to a method of making ion triggerable, water-dispersible cationic polymers and their applicability as binder compns. The present invention is further directed to fiber-containing fabrics and webs comprising ion triggerable, water-dispersible binder compns. and their applicability in water-dispersible personal care products, such as wet wipes. For example, a wet handsheet was made from air-laid nonwoven fabric as the basesheet, the copolymer of acryloyloxyethyl tri-Me ammonium chloride and Me acrylate as the binder, and sodium chloride as the ion trigger.

IT 36347-54-3P, Butyl acrylate-2-Methacryloyloxyethyl trimethyl ammonium chloride copolymer 113673-28-2P

(preparation of cationic acrylic polymers as binders for water-dispersible wet wipes)

RN 36347-54-3 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenate (CA INDEX NAME)

CM

CRN 5039-78-1 CMF C9 H18 N O2 . C1

● c1-

CM 2

CRN 141-32-2 CMF C7 H12 O2

RN 113673-28-2 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . C1

● c1-

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 96-33-3

CMF C4 H6 O2

IC ICM B32B031-00

INCL 156305000

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 35, 46, 62

3T water dispersible personal care cationic polyacrylate binder; cationic polyacrylate binder nonwoven fabric sodium chloride trigger handsheet Nonwoven fabrics

(cationic acrylic polymers as binders for nonwoven fabrics used in water-dispersible wet wipes)

Cosmetics

(cleansing, handsheets; cationic acrylic polymers as

binders for water-dispersible wet handsheets)

Fibrous materials

(water-dispersible wet wipes containing fibrous materials bound by cationic acrylic polymers)

Medical goods

(wipes, baby wipes; water-dispersible wet wipes containing

fibrous materials bound by cationic acrylic polymers) 36347-54-39, Butyl acrylate-2-Methacryloyloxyethyl trimethyl

ammonium chloride copolymer 113673-28-2P 116076-06-3P 220557-78-8P, 2-Acryloyloxyethyl trimethyl ammonium chloride-methyl acrylate copolymer 673496-25-8P 673496-26-9P 673496-27-0P 673496-28-1P

(preparation of cationic acrylic polymers as binders for

water-dispersible wet wipes)

REFERENCE COUNT: 200 THERE ARE 200 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2004:157447 HCAPLUS Full-text

DOCUMENT NUMBER: 140:201103

TITLE: Use of gradient copolymers as dispersing agent for

the treatment of pigments and solids

INVENTOR(S): Goebelt, Bernd; Haubennestel, Karlheinz; Krappe,

Udo; Della Valentina, Petra BYK-Chemie G.m.b.H., Germany PATENT ASSIGNEE(S):

SOURCE: Ger. Offen., 17 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT NO.			KIN	D	DATE			API	PLICAT	ION :	.00		D	ATE	
DE :	10236133			A1	-	2004	0226		DE	2002-	1023	6133		2	0020	807
TW S	592794			В		2004	0621		TW	2003-		9040		2	0030	711
CA 2	2435516			A1		2004	0207		CA	2003-		516		2	0030	718
EP :	1416019			A1		2004	0506		ΕP	2003-		6		2	0030	731
EP :	1416019 R: AT,							GB,	GF			LU.	NL,	SE,	MC,	
										, AL.						
AT 2	295871	,	~=,	T						2003-	1731					
ES 2	2240896			Т3		2005	1016		ES	2003-	 1731 	6		2	0030	731
KR 2	20040143	11		A		2004	0214		KR	2003-	5442	3		2	0030	806
JP :	20040662	35		A		2004	0304		JP	2003-	 2879 	16		2	0030	806
CN :	1495204			Α		2004	0512		CN	2003-	1586	22		2	0030	807

CN 1310975 C 20070418 US 20040143035

A1 20040722 US 2003-636319 20030807 /---

DE 2002-10236133 A 20020807 PRIORITY APPLN. INFO.: /---

Entered STN: 26 Feb 2004

AB Copolymers are manufactured by continuously living, controlled polymerization of ethylenically unsatd, compds, in the presence of nonpolymeric monofunctional initiators in such a way that the products exhibit a gradual hydrophilicity to hydrophobicity along the chains. These copolymers are posttreated to give dispersing agents for pigments in coatings and fillers in plastics,. A typical dispersant was manufactured by heating 3.3 mL benzenesulfonyl chloride, 103 g Bu methacrylate, 1 g 2,2'-bipyridine and 400 mg Cu powder in 25 mL methoxypropyl acetate (I) to 100°, adding 65 g N,N'dimethylaminoethyl methacrylate at 0.8 mL/min, heating 5 min at 100° heating 168 g polymer 2 h at 100° with 52 g benzyl chloride in 150 g each I and ethylene glycol mono-Bu ether until the reaction was complete.

ΤT 24938-16-7P, Butvl methacrylate-N,N-dimethylaminoethyl methacrylate-methyl methacrylate copolymer 26658-83-3P, Butyl methacrylate-N, N-dimethylaminoethyl methacrylate copolymer 143363-32-0P, Butyl methacrylate-N, N-dimethylaminoethyl methacrylate-2-ethylhexyl methacrylate copolymer

(dispersant precursor; use of copolymers with

hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers)

24938-16-7 HCAPLUS

RN CN

2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM

1 CRN 2867-47-2

CMF C8 H15 N O2

CM 2

CRN 97-88-1

CMF C8 H14 O2

CM 3

CRN 80-62-6

CMF C5 H8 O2

RN 26658-83-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 97-88-1 CMF C8 H14 O2

- RN 143363-32-0 HCAPLUS
 - 2N 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 688-84-6

CMF C12 H22 O2

CM 3

CRN 97-88-1 CMF C8 H14 O2

IT 146267-16-7P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate copolymer benzyl chloride salt 661478-15-5P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-methyl methacrylate copolymer benzyl chloride salt 661478-16-6P, Butyl methacrylate-N,N-dimethylaminoethyl methacrylate-2-ethylhexyl methacrylate copolymer benzyl chloride salt (dispersant; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and fillers)

RN 146267-18-7 HCAPLUS

2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 100-44-7 CMF C7 H7 C1

CMF C/H/C

Ph-CH2-C1

CM 2

CRN 26658-83-3

CMF (C8 H15 N O2 . C8 H14 O2)x

CCI PMS

CM 3

CRN 2867-47-2

CMF C8 H15 N O2

CM 4

CRN 97-88-1 CMF C8 H14 O2

RN 661478-15-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, compd. with (chloromethyl)benzene (CA INDEX NAME)

CM 1

CRN 100-44-7

CMF C7 H7 Cl

Ph-CH2-C1

CM 2

CRN 24938-16-7

CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2) x

CCI PMS

CM 3

CRN 2867-47-2

CMF C8 H15 N O2

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CM 4
         CRN 97-88-1
         CMF C8 H14 O2
n-BuO_________Me
         CM 5
         CRN 80-62-6
         CMF C5 H8 O2
 H2C O
Me_U_U_OMe
RN 661478-16-6 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
     2-(dimethylamino)ethyl 2-methyl-2-propenoate and 2-ethylhexyl
     2-methyl-2-propenoate, compd. with (chloromethyl)benzene (9CI) (CA
    INDEX NAME)
    CM 1
    CRN 100-44-7
    CMF C7 H7 C1
 Ph-CH2-C1
    CM 2
    CRN 143363-32-0
    CMF (C12 H22 O2 . C8 H15 N O2 . C8 H14 O2)x
    CCI PMS
         CM 3
         CRN 2867-47-2
         CMF C8 H15 N O2
```

 $\texttt{Me}_2\texttt{N-}\texttt{CH}_2-\texttt{CH}_2-\texttt{O-}\overset{\texttt{O}}{\textbf{U}}-\overset{\texttt{CH}_2}{\textbf{U}}-\texttt{Me}$

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CM 4
         CRN 688-84-6
         CMF C12 H22 O2
         CM
         CRN 97-88-1
         CMF C8 H14 O2
 n-Buo_U_U_Me
TC
    TCM B01F017-52
CC
    42-6 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 35, 37
    Coating materials
       Dispersing agents
     Fillers
     Pastes
     Pigments, nonbiological
        (use of copolymers with hydrophilicity-hydrophobicity gradient
        along chains as dispersing agents for pigments and fillers)
     24938-16-7P, Butyl methacrylate-N, N-dimethylaminoethyl
     methacrylate-methyl methacrylate copolymer 25702-92-5P, Butyl
     methacrylate-2-hydroxyethyl methacrylate copolymer 25951-87-5P,
     Butvl methacrvlate-glycidyl methacrvlate copolymer 26658-83-3P
     , Butyl methacrylate-N, N-dimethylaminoethyl methacrylate copolymer
     28549-52-2P, Butyl methacrylate-tert-butyl methacrylate copolymer
     143363-32-0P, Butvl methacrylate-N, N-dimethylaminoethyl
     methacrylate-2-ethylhexyl methacrylate copolymer 661478-14-4P, Butyl
     methacrylate-1-(2-methacryloyloxyethyl)-2-imidazolidinone methacrylate
     copolymer
        (dispersant precursor; use of copolymers with
       hydrophilicity-hydrophobicity gradient along chains as dispersing
        agents for pigments and fillers)
     25702-92-5DP, Butyl methacrylate-2-hydroxyethyl methacrylate
     copolymer, esters with polyphosphoric acids 28549-52-2DP, Butyl
     methacrylate-tert-butyl methacrylate copolymer, hydrolyzed
     146267-18-7P, Butyl methacrylate-N, N-dimethylaminoethyl
     methacrylate copolymer benzyl chloride salt 661478-15-5P,
     Butyl methacrylate-N, N-dimethylaminoethyl methacrylate-methyl
```

methacrylate copolymer benzyl chloride salt 661478-16-6P, Butyl methacrylate-N, N-dimethylaminoethyl methacrylate-2-ethylhexyl methacrylate copolymer benzyl chloride salt 663152-70-3P, Butyl methacrylate-glycidyl methacrylate copolymer p-nitrobenzoate (dispersant; use of copolymers with hydrophilicity-hydrophobicity gradient along chains as dispersing agents for pigments and

fillers) REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN 2003:734373 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 140:375580

TITLE:

Photopolymerized and photografted porous polymer monoliths for fabrication of

microfluidic analytical systems AUTHOR(S): Svec, Frantisek; Frechet, Jean M. J.; Hilder,

Emily F.; Peterson, Dominic S.; Rohr, Thomas CORPORATE SOURCE: University of California, Berkeley, CA,

94720-1460, USA

Micro Total Analysis Systems 2002, Proceedings of SOURCE:

the uTAS 2002 Symposium, 6th, Nara, Japan, Nov.

3-7, 2002 (2002), Volume 1, 332-334.

Editor(s): Baba, Yoshinobu; Shoji, Shuichi; Van den Berg, Albert. Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 69EMKZ; ISBN: 1-4020-1011-7

DOCUMENT TYPE: Conference

LANGUAGE: English ED Entered STN: 19 Sep 2003

Two building blocks required for the construction of complex microfluidic systems, an enzymic reactor and a separation unit, were designed, prepared, and evaluated. These elements consisting of porous polymer monoliths were prepared in situ via a UV initiated polymerization of a monolithic material followed by photoinitiated grafting of polymer chains involving desired functionalities. The function of the monolithic reactor was demonstrated with digestion of a variety of proteins using immobilized trypsin. Extremely efficient electrochromatog, separation of proteins was achieved at elevated temperature in isocratic mode.

ΙT 684233-29-2, Butvl methacrvlate-N,N-dimethvl-N-

methacryloyloxyethyl-N-(3-sulfopropyl)ammonium betaine-ethylene dimethacrylate graft copolymer

(photopolymd, and photografted porous unsatd, polymer monoliths for lining the channels of components of microfluidic anal. systems)

RN 684233-29-2 HCAPLUS

CN 1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-

propenyl)oxylethyll-3-sulfo-, inner salt, polymer with butyl 2-methyl-2-propenoate and 1,2-ethanediyl bis(2-methyl-2-propenoate), graft (9CI) (CA INDEX NAME)

CM

CRN 3637-26-1

CMF C11 H21 N O5 S

CM 2

CRN 97-90-5 CMF C10 H14 O4



CM 3

CRN 97-88-1 CMF C8 H14 O2

- CC 35-4 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 34, 80
- IT 684233-29-2, Butyl methacrylate-N,N-dimethyl-N-methacryloyloxyethyl-N-(3-sulfopropyl)ammonium betaine-ethylene dimethacrylate graft copolymer

(photopolymd. and photografted porous unsatd. polymer monoliths for lining the channels of components of microfluidic anal. systems)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCE AVAILABLE FOR

THIS

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:591047 HCAPLUS Full-text

DOCUMENT NUMBER: 139:150723

TITLE: Film-forming antimicrobial compositions for tissue and skin antisepsis used in topical pharmaceutical

products and cosmetics

INVENTOR(S): Wang, Danli; Scholz, Matthew T.; Zhu, Dong-wei;

Lu, Triet M.

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: PCT Int. Appl., 128 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT				KIN		DATE					ION				ATE
	2003				A1		2003				002-	US38				0021205
	W: RW:	CN, GE, LC, NO, TM, GH, BY, EE,	CO, GH, LK, NZ, TN, GM, KG, ES,	CR, GM, LR, OM, TR, KE, KZ,	CU, HR, LS, PH, TT, LS, MD, FR,	CZ, HU, LT, PL, TZ, MW, RU, GB,	AU, DE, ID, LU, PT, UA, MZ, TJ, GR,	DK, IL, LV, RO, UG, SD, TM, IE,	DM, IN, MA, RU, UZ, SL, AT, IT,	DZ, IS, MD, SC, VC, SZ, BE, LU,	BG, EC, JP, MG, SD, VN, TZ, BG, MC,	BR, EE, KE, MK, SE, YU, UG, CH, NL,	ES, KG, MN, SG, ZA, ZM, CY, PT,	FI, KP, MW, SK, ZM, ZW, CZ, SE,	GB, KR, MX, SL, ZW AM, DE, SI,	GD, KZ, MZ, TJ, AZ, DK, SK,
		TD,	TG	ВJ,			CI,							MR,		
US	2003	0194	415		A1		2003	1016		US 2		5215 	8		2	0020116
	6838 2473				B2 A1		2005 2003			CA 2		2473	841		2	0021205
EP	1465	676			A1		2004	1013		EP 2	002-		31		2	0021205
EP	1465 R:	AT,				DK,	2007 ES, FI,	FR,			IT,	LI,				
BR	2002			51,	A		2004				002-			02,		0021205
JP	2005	5208	12		Т		2005	0714		JP 2	003-		61		2	0021205
AT	3698	81			T		2007	0915		AT 2	002-		31		2	0021205
EP	1849	487			A2		2007	1031		EP 2	007-		25		2	0021205
	R:	IT,			MC,	NL,	CZ, PT,	SE,	SI,	SK,	TR					
ES	2290	351			Т3		2008	0216		ES 2		7923 	31		2	0021205
AU	2002	3577	90		B2		2008	0306		AU 2		3577 	90		2	0021205
MX	2004	0068	39		A		2004	1206		MX 2		6839 			2	0040714
NO	2004	0032	97		A		2004	1007		NO 2		3297 			2	0040806
US	US 20050025794						2005	0203		US 2		9222 	62		2	0040819
US PRIORIT	7323 Y APP		INFO	.:	B2		2008	0129		US 2		5215	8		A 2	0020116
										EP 2	002-	 7923 	31		A3 2	0021205
										WO 2	002-		951		W 2	0021205

ED Entered STN: 01 Aug 2003

AB The title compns. comprise: (A) a water-soluble or water-dispersible vinyl polymer having amine group on side-chains, and a copolymd. hydrophobic monomer; (B) water, (C) a surfactant, and (D) an active agent selected from antimicrobial agent, a pharmaceutical or a cosmetic agent. Thus, polymerizing 2-ethylhexyl acrylate with Ageflex FA 1080M (acrylolyoxyethyltrimelylammonium)

chloride) and AM 90G (polyethylene glycol Me ether acrylate) in ratio of 75/20/5 gave an A, 5% of which was mixed with 7.5% Povidone-iodine USP (antimicrobial agent), 5% Polystep B 22 (surfactant), 3.3% ethano, 6% lactic acid and balance water to give a title composition (pH 3.5-4) showing good human skin antimicrobial activity result.

(T 568592-95-9F 569676-28-4P (prepns. of water-soluble polymer in film-forming antimicrobial

compns. for tissue and skin antisepsis)

568592-95-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, dodecyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

RN

CRN 44992-01-0 CMF C8 H16 N O2 . C1

Me3+N-CH2-CH2-O-C-CH-CH2

● c1 =

CM 2

CRN 142-90-5 CMF C16 H30 O2

CM

CRN 141-32-2

CMF C7 H12 O2

n-вио_**Й_**сн<u></u>сн2

CM 4

CRN 80-62-6 CMF C5 H8 O2

RN 569676-28-4 HCAPLUS

CN Ethanaminium, N,NN-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with dodecyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0 CMF C8 H16 N O2 . C1

Me3+N-CH2-CH2-O-C-CH-CH2

● c1 =

CM 2

CRN 142-90-5 CMF C16 H30 O2

Me_ (CH2)11_0__U_U_Me

CM 3

CRN 97-86-9 CMF C8 H14 O2

i-Buo_U_U_Me

CM 4

CRN 80-62-6

CMF C5 H8 O2

ICM A61L026-00

ICS A61K009-70; A01N033-12

CC 38-3 (Plastics Fabrication and Uses) Section cross-reference(s): 10, 62, 63

Surfactants

(amphoteric; in film-forming antimicrobial compns. for tissue and skin antisepsis used in topical pharmaceutical products and cosmetics)

Surfactants

(anionic; in film-forming antimicrobial compns. for tissue and skin antisepsis used in topical pharmaceutical products and cosmetics)

(cleansing; film-forming antimicrobial compns. for tissue and skin antisepsis used in topical pharmaceutical products and cosmetics)

Surfactants

(nonionic; in film-forming antimicrobial compns, for tissue and skin antisepsis used in topical pharmaceutical products and cosmetics)

568592-93-8P, Ageflex FA 1Q80MC-AM 90G-2-ethylhexyl acrylate graft copolymer 568592-95-0P

569676-28-4P

(prepns. of water-soluble polymer in film-forming antimicrobial

compns. for tissue and skin antisepsis)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:508534 HCAPLUS Full-text 139:69673

DOCUMENT NUMBER:

TITLE: Manufacture of nitrogen-containing copolymers with

narrow particle size distribution by suspension

polymerization

Konami, Yukichi; Nakagawa, Takeshi INVENTOR(S): Mitsubishi Rayon Co., Ltd., Japan PATENT ASSIGNEE(S): Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003183310	A	20030703	JP 2001-387282	20011220
			<	
PRIORITY APPLN. INFO.:			JP 2001-387282	20011220
			<	

Entered STN: 03 Jul 2003

- AB The copolymers are manufactured by suspension polymerization of water-soluble N-containing monomers and ethylenically unsatd. monomers in the presence of polymerization catalysts satisfying decomposition amount of the catalysts to 100 g monomers per 1 h (X) ≥0.5 mmol derived from expressions X = (W0 W1)/Mw, W1 = W0 exp(-kt), and In k = In A Ea/RT [W0 initial addition weight (g) of polymerization catalysts to 100 g monomers; W1 = residual catalyst weight to 100 g monomers after 1-h polymerization; k = decomposition rate constant (s-1); t = time (3600 s); A = frequency factor; Ea = activation energy (cal/mol); R = gas constant (1.98° cal/mol-K); T = absolute temperature (K); Mx = mol. weight of catalysts). Thus, polymerization of 300 parts dimethylaminoethyl methacrylate and 200 parts Me methacrylate in the presence of 5 parts V 65 [2,2°-azobis(2,4~dimethylvaleronitrile), X 0.83 mmol) and 5 parts 10% acrylamide- methacryloyloxyethyltrimethylammonium chloride copolymer dispersing agent gave 96% copolymer with N-containing monomer content 59%.
- IT 26658-83-3P, Butyl methacrylate-dimethylaminoethyl

methacrylate copolymer

(manufacture of N-containing copolymers with narrow particle size distribution by suspension polymerization)

RN 26658-83-3 HCAPLUS

2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 97-88-1

CMF C8 H14 O2

IC ICM C08F002-18

ICS C08F220-34; C08F220-60

CC 35-3 (Chemistry of Synthetic High Polymers)

IT Dispersing agents

Particle size distribution

(manufacture of N-containing copolymers with narrow particle size distribution by suspension polymerization)

IT 26222-42-4P, Dimethylaminoethyl methacrylate-methyl methacrylate copolymer 26659-83-3P, Butyl methacrylate-dimethylaminoethyl methacrylate copolymer 137683-21-7P,

Dimethylaminopropylacrylamide-methyl methacrylate copolymer (manufacture of N-containing copolymers with narrow particle size

10/534,196

distribution by suspension polymerization)

L50 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:434622 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 139:8202

TITLE: Pigment compositions with modified ATRP copolymer dispersants

INVENTOR(S): Auschra, Clemens; Eckstein, Ernst; Zink,

Marie-Odile; Muehlebach, Andreas
PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

E		ENT 1						DATE									DATE		
Ţ								2003				002-					2002	11	21
		W:	CN, GE, LC, NO,	CO, GH, LK, NZ,	CR, GM, LR, OM,	CU, HR, LS, PH,	CZ, HU, LT, PL,	AU, DE, ID, LU, PT,	DK, IL, LV, RO,	DM, IN, MA, RU,	DZ, IS, MD, SC,	EC, JP, MG, SD,	EE, KE, MK, SE,	ES, KG, MN, SG,	FI, KP, MW, SI,	GB KR MX SK	, GD , KZ , MZ	, , ,	B1.1
		RW:	GH, BY, EE,	GM, KG, ES,	KE, KZ, FI,	LS, MD, FR,	MW, RU, GB,	TZ, MZ, TJ, GR, CM,	SD, TM, IE,	SL, AT, IT,	SZ, BE, LU,	TZ, BG, MC,	UG, CH, NL,	ZM, CY, PT,	ZW, CZ, SE,	AM DE SK	, AZ , DK	,	
(CA	2465						2003				002-	2465						
1	AU	2002	3520	86		A1		2003	0610		AU 2	002-	 3520 	86			2002	11:	21
E	BR	2002	146	16		A		2004	0914		BR 2	002-	1461	6			2002	11	21
E	EP	14659	935			A1		2004	1013		EP 2	002-	 7877 	60			2002	11	21
ن	JP		PT,	IE,	SI,	LT,	LV,	ES, FI, 2005	RO,	MK,	CY,	IT, AL,	LI, TR, 5474	BG,	CZ,	EE	, SK		21
(CN	1639	216			A		2005	0713		CN 2			80			2002	11	21
Ţ	CN US	10040 20050	0860 0004:	6 317		C A1		2008 2005			US 2	004-	4955	19			2004	05	14
1	XM	2004	0046	93		Α		2004	0819		MX 2	004-	4693 				2004	05	18
τ	JS	2006	0160	950		A1		2006	0720		US 2	006-		20			2006	03:	21
PRIOR	ITY	APPI	LN.	INFO	. :						EP 2	001-		58		A	2001	11:	29
											WO 2	002-		064		W	2002	11:	21
											US 2	004-	4955	19		A1	2004	05	14

ED Entered STN: 06 Jun 2003

- AB The present invention relates to a composition containing modified block copolymer dispersants and dispersible inorg or organic pigments. The block copolymers are prepared by atom transfer radical polymerization (ATRP) and modified with a salt forming group. The pigment composition is useful for preparing coating compns. prints, images, inks or lacquers and other disperse systems. A Bu acrylate-2-dimethylaminoethyl acrylate block copolymer dispersant was prepared by ATRP.
- IT 143410-36-9P, Butyl acrylate-2-(dimethylamino)ethyl methacrylate graft copolymer
- (comb; pigment compns. with modified ATRP copolymer dispersants)
- RN 143410-36-0 HCAPLUS CN 2-Propencic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propencate, graft (9CI) (CA INDEX NAME)
 - CM 1
 - CRN 2867-47-2
 - CMF C8 H15 N O2

- CM 2
- CRN 141-32-2
- CMF C7 H12 O2

- II 281198-01-4P, Butyl acrylate-2-Dimethylaminoethyl acrylate block copolymer
- (pigment compns. with modified ATRP copolymer dispersants)
- RN 281198-01-4 HCAPLUS
- CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, block (9CI) (CA INDEX NAME)
 - CM 1
 - CRN 2439-35-2
 - CMF C7 H13 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

n-Bu0-0-CH-CH2

IC ICM C08F293-00

ICS C08L053-00; C08F002-38; C08F004-40; C09D011-00; C08K005-00; C09D153-00

- CC 42-5 (Coatings, Inks, and Related Products)
- IT Reinforced plastics

(glass fiber-reinforced; pigment compns. with modified

ATRP copolymer dispersants)

II 143410-36-0F, Butyl acrylate-2-(dimethylamino)ethyl methacrylate graft copolymer

(comb; pigment compns. with modified ATRP copolymer dispersants)
17 9003-49-0DP, Poly-n-butylacrylate, methacrylate-terminated
9003-49-0P, Poly-n-butylacrylate 281198-01-4P, Butyl
acrylate-2-Dimethylaminoethyl acrylate block
copolymer

(pigment compns. with modified ATRP copolymer dispersants)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2003:94210 HCAPLUS Full-text

DOCUMENT NUMBER: 138:138885

TITLE: Silicone-containing polymer water repellents
INVENTOR(S): Terabayashi, Takeshi; Shimizu, Yoshio; Komatsu,

Masanori; Nakamura, Isae PATENT ASSIGNEE(S): Lion Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanes

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003034784	A	20030207	JP 2001-255307	20010724
			<	
PRIORITY APPLN. INFO.:			JP 2001-255307	20010724

ED Entered STN: 07 Feb 2003

AB The water repellents, showing easy removability when washed with detergents, are prepared from (A) 5-60% silicone macromers H2C:CRICO2R2SiMeh[(OSiMe2)]OSiMe2R3]3-h [RI = H, Me; R2 = (ether-containing) C1-6 divalent aliphatic group; R3 = C1-30 aliphatic, aromatic, OH group; h = 0, 1, 2; j = 0-500], (B) vinyl monomers containing tertiary amino groups or quaternary ammonium groups, and (C) carboxyl-containing vinyl monomers satisfying mol ratios B/(B + C) 1-40 mol%. Thus, an EtOH solution containing 10% graft copolymer prepared from Silaplane FW 0711 (silicone macromer) 20,

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dimethylaminoethyl methacrylate 10, methacrylic acid 40, and tert-Bu methacrylate 30% was sprayed on a cotton fabric and dried to give a test piece showing high water repellency and the same surface appearance and texture as before the spraying.

IT 494197-85-2P, Dimethylaminoethyl methacrylate-methacrylic acid-Silaplane FM 0711-tert-butyl methacrylate graft copolymer

(silicone-containing polymer water repellents)

RN 494197-85-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with

 α -(butyldimethylsilyl)- ω -[[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]oxy]poly[oxy(dimethylsilylene)],

2-(dimethylamino)ethyl 2-methyl-2-propenoate and 1,1-dimethylethyl

2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 149925-73-5

CMF (C2 H6 O Si)n C15 H32 O3 Si2

CCI PMS

CM 2

CRN 2867-47-2

CMF C8 H15 N O2

CM 3

CRN 585-07-9

CMF C8 H14 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

Me_C_CO2H

TC ICM C09K003-18

> ICS C08F290-06; C09D004-00; C09D183-07; C23C022-00; C23C026-00; D06M015-263; D06M015-267; D06M015-643

42-7 (Coatings, Inks, and Related Products)

TТ 409323-53-1P, Dimethylaminoethyl methacrylate-methacrylic

acid-Silaplane FM 0711 graft copolymer

494197-85-29, Dimethylaminoethyl methacrylate-methacrylic

acid-Silaplane FM 0711-tert-butyl methacrylate graft

copolymer 494197-86-3P, Dimethylaminoethyl

methacrylate-lauryl methacrylate-methacrylic acid-Silaplane FM 0711 graft copolymer

(silicone-containing polymer water repellents)

L50 ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:759857 HCAPLUS Full-text

DOCUMENT NUMBER: 138:91441

TITLE: Design of new pigment dispersants by controlled

radical polymerization

AUTHOR(S): Auschra, Clemens; Eckstein, Ernst; Muhlebach, Andreas; Zink, Marie-Odile; Rime, Francois

CORPORATE SOURCE: Ciba Specialty Chemicals, Segment Coating Effects,

Basel, CH-4002, Switz.

SOURCE: Progress in Organic Coatings (2002),

45(2-3), 83-93

CODEN: POGCAT; ISSN: 0300-9440

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

ED Entered STN: 07 Oct 2002

- Polymeric pigment dispersants are essential for the formulation of high solids AB and waterborne coatings. New technologies for controlled polymerization play an important role for the development of improved pigment dispersants. In the last years, big progress has been made especially on nitroxide-mediated controlled free radical polymerization, as well as on atom transfer radical polymerization (ATRP). Both techniques overcome limitations of classical polymerization methods and provide an efficient route to functional copolymers with exact control of mol. weight distribution and mol. architecture. New developed nitroxide polymerization regulators as well as ATRP were used for the synthesis of acrylic block copolymers, which are a promising class of dispersants, especially for difficult to disperse organic pigaments. On the example of selected pigments, it was investigated how structural parameters like chemical composition, block length and mol. weight influence the dispersant performance. Special attention will be given to the rheol. behavior of pigment concs.
- 281198-01-4P, Butvl acrylate-dimethylaminoethyl acrylate block copolymer

(design of new pigment dispersants by controlled radical polymerization)

RN 281198-01-4 HCAPLUS

2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl CN 2-propenoate, block (9CI) (CA INDEX NAME)

CRN 2439-35-2 CMF C7 H13 N O2

Me 2 N - CH 2 - CH 2 - O - C - CH - CH 2

CM 2

CRN 141-32-2 CMF C7 H12 O2

42-6 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

Dispersing agents

Molecular weight

Molecular weight distribution Pigments, nonbiological

(design of new pigment dispersants by controlled radical polymerization)

281198-01-4P, Butvl acrylate-dimethylaminoethyl acrylate block copolymer

(design of new pigment dispersants by controlled radical polymerization) REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2002:754440 HCAPLUS Full-text

DOCUMENT NUMBER: 137:279621

TITLE: Water-dispersible, cationic polymers, a method of

making same and items using same

INVENTOR(S): Branham, Kelly D.; Chang, Yihua; Lang, Frederick

J.; McBride, Erin; Bunyard, Clay

PATENT ASSIGNEE(S): Kimberly-Clark Worldwide, Inc., USA

SOURCE: PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002077048	A2	20021003	WO 2002-US4943	20020219
			<	
WO 2002077048	A3	20030424		

		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	
												EC,						
												JP,						
												MG,						
												SE,				SL,	ΤJ,	
												YU,						
		RW:										TZ,						
												CH,						
												SE,			ВJ,	CF,	CG,	
												SN,						
	US	20030	0032	352		A1		2003	0213	1	US 2			61		2	001032	2
	ΑU	2002	2421	99		A1		2002	1008	- 1	AU 2			99		2	002021	9
												<						
		20022						2007										
	EP	1379	566			A2		2004	0114		EP 2			20		2	002021	9
										on	on					0.77		
		R:										IT,		LU,	NL,	SE,	MC,	
	TD	20041												0.5		-	002021	^
	JP	20045	3329	10		1		2004	1028	,	JP 2			05		2	002021	9
	CM	16080	006			70		2005	0/120		OM 2			2.2		2	002021	۵
	CIV	1000	000			n		2003	0420	,	CIV Z			32			002021	,
	CN	10039	2021	2		C		2008	1528									
		20020		16		Δ					BR 2	002-	R316			2	002021	g
	DI	2002	0005	10		n		2000	0020		DIN 2					-	002021	
	7.A	20030	0070	29		А		2006	1129		7.A 2	003-				2	003010	1
						**										_		_
	US	20040	0030	080		A1		2004	0212	1	US 2	003-		12		2	003062	6
	•••															_		•
	MX	20030	0082	44		A		2004	0129	1	MX 2	003-	8244			2	003091	1
	KR	84925	59			В1		2008	0729	1	KR 2	003-	7121	85		2	003091	9
												<						
101	RIT	APP1	LN.	INFO	. :					1	US 2	001-	8152	61		A 2	001032	2
												<						
										1	WO 2	002-	JS49	43	1	W 2	002021	9

ED Entered STN: 04 Oct 2002

PRT

AB

The present invention is directed to ion-sensitive water-dispersible, triggerable cationic polymers containing ≥1 hydrophobic monomer that are insol. in a wetting composition containing an insolubilizing agent such as a divalent metal salt capable of forming complex anions in solution at >0.5%, but are soluble when diluted with water containing other ions such as divalent salt solns in hard water with ≤200 ppm Ca2+ and Mg2+. The present invention is also directed to a method of making triggerable, water-dispersible cationic polymers and their applicability as binder compns. The present invention is further directed to nonwoven fabrics and webs comprising triggerable, water-dispersible binder compns. and their applicability in water-dispersible personal care products, such as wet wipes. A typical polymer was manufactured by free-radical polymerization of acrylamide 39.1, Bu acrylate 32.0, 2 - ethylhexyl acrylate 18.4, and 2-methacryloyloxyethyltrimethylammonium chloride 27.6 g in MeOH.

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methacryloyloxyethyltrimethylammonium chloride copolymer 464174-65-0P, Acrylamide-butyl acrylate-2-ethylhexyl acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer 464174-66-1P, Butyl acrylate-2-ethylhexyl acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer 464916-47-0P, Acrylamide-acrylic acid-butyl

IT 36347-54-3P, Butyl acrylate-2-

10/534,196

 ${\tt acrylate-2-ethylhexyl\ acrylate-2-methacryloyloxyethyltrimethylammonium\ chloride\ copolymer}$

(water-dispersible, cationic polymers for ion-sensitive,

- triggerable binders for wet wipes)
 RN 36347-54-3 HCAPLUS
- CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate (CA INDEX NAME)
 - CM

CRN 5039-78-1 CMF C9 H18 N O2 . C1

0 CH2 Me3+N-CH2-CH2-O-U-U-Me

CM 2

CRN 141-32-2 CMF C7 H12 O2

п-вио_С_СН_СН2

- RN 464174-65-0 HCAPLUS
- CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate and 2-propenamide (9C1) (CA INDEX NAME)
 - CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . C1

€ c1 =

CM 2

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 79-06-1 CMF C3 H5 N O

- RN 464174-66-1 HCAPLUS
- CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate and 2-ethylhexyl 2-propenoate (9C1) (CA INDEX NAME)

CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . C1

$$\underset{\text{Me}\,{}_3^+\text{N}_\,\text{CH}_2_\,\text{CH}_2_\,\text{O}}{\text{CH}_2} \overset{\text{O}}{\text{L}} \overset{\text{CH}_2}{\text{L}} \underset{\text{Me}}{\text{Me}}$$

● c1-

CRN 141-32-2 CMF C7 H12 O2

n-Buo-C-cH-cH:

CM 3

CRN 103-11-7

CMF C11 H20 O2

RN 464916-47-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1

CMF C9 H18 N O2 . C1

● c1-

CM 2

CRN 141-32-2 CMF C7 H12 O2

n-Buo_C_CH__CH2

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CM 3
    CRN 103-11-7
    CMF C11 H20 O2
 Et-CH-Bu-n
    CM
    CRN 79-10-7
    CMF C3 H4 O2
но_0_сн_сн2
   ICM C08F220-34
    ICS D21H019-20; B05D007-24; D21H017-45; D04H001-64; C11D017-04
    35-4 (Chemistry of Synthetic High Polymers)
    Section cross-reference(s): 43, 46, 62
    36347-54-3P, Butyl acrylate-2-
    methacryloyloxyethyltrimethylammonium chloride copolymer
    464174-65-0P, Acrylamide-butyl acrylate-2-ethylhexyl
    acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer
    464174-66-1P, Butyl acrylate-2-ethylhexyl
    acrylate-2-methacryloyloxyethyltrimethylammonium chloride copolymer
    464916-47-0P, Acrylamide-acrylic acid-butyl
    acrylate-2-ethylhexyl acrylate-2-methacryloyloxyethyltrimethylammonium
    chloride copolymer
       (water-dispersible, cationic polymers for ion-sensitive,
       triggerable binders for wet wipes)
REFERENCE COUNT:
                              THERE ARE 7 CITED REFERENCES AVAILABLE FOR
                              THIS RECORD. ALL CITATIONS AVAILABLE IN THE
                              RE FORMAT
L50 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                        2002:171963 HCAPLUS Full-text
DOCUMENT NUMBER:
                        136:202196
TITLE:
                        Composition based on nanoparticles or nanolatex of
                        polymers for treating fabrics during
                        laundering
                        Aubay, Eric; Labeau, Marie-pierre; Harrison, Ian
INVENTOR(S):
PATENT ASSIGNEE(S):
                       Rhodia Chimie, Fr.
SOURCE:
                        PCT Int. Appl., 31 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                       Patent
```

LANGUAGE:

French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.							DATE		APPLICATION NO.							
	0 2002				A2		2002				001-	FR26				20010822	
Ū.	O 2002 W:	AE, CN, GE, LC, NO, TR,	AG, CO, GH, LK, NZ, TT,	CR, GM, LR, PH, TZ,	CU, HR, LS, PL, UA,	AT, CZ, HU, LT, PT, UG,	DE, ID, LU, RO, US,	AZ, DK, IL, LV, RU, UZ,	BA, DM, IN, MA, SD, VN,	DZ, IS, MD, SE, YU,	BG, EC, JP, MG, SG, ZA,	EE, KE, MK, SI, ZW	ES, KG, MN, SK,	FI, KP, MW, SL,	GE KF MX TG	A, CH, B, GD, R, KZ, I, MZ, I, TM,	
	RW:	KG, GB,	KZ, GR,	MD, IE,	RU, IT,	TJ,	TM,	AT, NL,	BE, PT,	CH, SE,	CY,	DE, BF,	DK,	ES,	FI	, BY, , FR, G, CI,	
F	R 2813				A1						000-	1094	5			20000825	
	R 2813 R 2813				B1 A1		2006 2002			FR 2	2001-					20010611	
	R 2813 S 2002		208		B1 A1		2007 2002			US 2	2001-		79			20010711	
	S 7071 A 2420				B2 A1		2006 2002			CA 2	<- :-2001	 2420	351			20010822	
A	U 2001	.0841	51		A		2002	0313		AU 2	2001-	 8415: 	1			20010822	
В	R 2001	0133	81		Α		2003	0610		BR 2	2001-		1			20010822	
E	P 1366	083			A2		2003	1203		EP 2	2001-	 9631 	16			20010822	
	R:						ES,						LU,	NL,	SE	MC,	
J	P 2004	15124	31		Т		2004	0422		JP 2		5239 	65			20010822	
U	S 2004	10038	851		A1		2004	0226		US 2	003-		55			20030730	
U	S 2006	0211	594		A1		2006	0921		US 2		4365 	46			20060519	
PRIORI	TY APE	LN.	INFO	. :						FR 2	000-		5		A	20000825	
										FR 2	001-				A	20010611	
										US 2	001-		79		A1	20010711	
										WO 2	001-		49		W	20010822	

ED Entered STN: 08 Mar 2002

AB The invention concerns the use, in a composition for treating fabrics, especially cotton fabrics, in aqueous or wet medium, of nanoparticles of ≥1 polymer or ≥1 nanoparticular latex ≥1 polymer insol. in conditions of use in aqueous or wet medium of said composition, as creaseproofing and/or ironingassist agent. Said composition can be a formulation of solid or liquid detergent, a liquid rinsing and/or a softening formulation, a drying additive contacted with the wet fabric in a dryer, an aqueous ironing formulation, a

prespotter deposited on the dry fabrics prior to a washing operation. The polymer comprises units of hydrophobic nonionic monomers or monomers nonionizable at the use pH, optionally, units of ≥ 1 crosslinking monomer and, optionally, ≥ 1 unit of hydrophilic monomers selected from cationic monomers or monomers cationizable at the use pH, monomers that are amphoteric at the use pH, anionic monomers or monomers nonionizable at use pH.

IT 401809-72-1, Butyl acrylate-2-hydroxyethyl

methacrylate-methacrylic acid-methyl methacrylate-SPE copolymer (composition based on nanoparticles or nanolates of polymers for treating fabrics during operating the language of the composition of the c

treating fabrics during or prior to laundering)

NN 401009-12-1 HARDOS

N1-Propanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-3-sulfo-, inner salt, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM :

CRN 3637-26-1 CMF C11 H21 N O5 S

CM 2

CRN 868-77-9

CMF C6 H10 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

H2C

CM 5

CRN 79-41-4 CMF C4 H6 O2

Me-C-CO2H

IC C08F

CC 46-5 (Surface Active Agents and Detergents)

creaseproofing polymer nanoparticle laundry; ironing

assistant polymer nanoparticle laundry

Creaseproofing

(agents; composition based on nanoparticles or nanolatex of polymers for treating fabrics during or prior to laundering)

Nanoparticles

(composition based on nanoparticles or nanolatex of polymers for treating fabrics during or prior to laundering)

Detergents

(laundry; composition based on nanoparticles or nanolatex of polymers for treating fabrics during or prior to

laundering)

401809-72-1, Butyl acrylate-2-hydroxyethyl

Ω

methacrylate-methacrylic acid-methyl methacrylate-SPE copolymer

(composition based on nanoparticles or nanolatex of polymers for treating fabrics during or prior to laundering)

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN 2001:785877 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 135:335210

TITLE: Blood filter material containing graft

copolymers for leukocyte removal

INVENTOR(S): Sasaki, Hiroaki; Hayashi, Shizue; Miura, Morikazu

PATENT ASSIGNEE(S): Asahi Medical Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001300221	A	20011030	JP 2000-127610	20000427
			<	
RIORITY APPLN. INFO.:			JP 2000-127610	20000427

ED Entered STN: 30 Oct 2001

AB The invention relates to a blood filter material for efficient removal of leukocyte, wherein the material contains a graft copolymer consisting of a main chain containing nonionic hydrophilic monomer and basic N-containing monomer, and graft chains containing hydrophobic monomer. A graft copolymer was prepared from Me methacrylate, 2-isocyanatoethyloxy methacrylate, 2-hydroxyethyl methacrylate, and dimethylaminoethyl methacrylate. The graft copolymer was coated on a polyethylene terephthalate fiber to obtain a blood filter material.

<--

II 370598-77-9p 370598-78-0p

(blood filter material containing graft copolymers for leukocyte removal)

RN 370598-77-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-isocyanatoethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

PR.

CRN 30674-80-7 CMF C7 H9 N O3

CM 2

CRN 2867-47-2 CMF C8 H15 N O2

Me 2 N - CH 2 - CH 2 - O - CH 2 - Me

CM 3

CRN 868-77-9 CMF C6 H10 O3

CRN 97-88-1 CMF C8 H14 O2

D-BUO-U-U-Me

RN 370598-78-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-isocyanatoethyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-α-methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 30674-80-7

CMF C7 H9 N O3

CM 2

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

$$Me = C + CH_2 - CH_2$$

CM 3

CRN 2867-47-2

CMF C8 H15 N O2

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Me 2 N — CH 2 — CH 2 — O — U — U — Me
```

CRN 97-88-1 CMF C8 H14 O2

O CH2 n-Buo-U-U-Me

TCM B01D039-14

ICS A61M001-22; A61M001-36; B01D015-08; B01J020-26; C08F291-00

63-7 (Pharmaceuticals)

Section cross-reference(s): 38

methacrylate graft copolymer blood filter leukocvte

ΙT Polyester fibers, biological studies

(blood filter material containing fibers coated with

graft copolymers for leukocyte removal)

Blood

Leukocyte

(blood filter material containing graft copolymers

for leukocyte removal)

Filters

(fiber; blood filter material containing graft

copolymers for leukocyte removal)

Polymers, biological studies (graft; blood filter material containing graft

copolymers for leukocyte removal)

370598-76-8P 370598-77-9P 370598-78-0P

370598-79-1P

(blood filter material containing graft copolymers for leukocyte removal)

L50 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:565117 HCAPLUS Full-text

DOCUMENT NUMBER: 135:137859 TITLE: Salt-free aqueous dispersions of water-soluble

(co)polymers based on cationic monomers, method for making same and uses thereof

INVENTOR(S): Riondel, Alain; Tembou, N'zudie Denis; Vanhoye,

Didier

PATENT ASSIGNEE(S): ATOFINA, Fr.; Tembou N'zudie, Denis

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Pat.ent. LANGUAGE: French FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO	2001	0552	2.5		A2		2001	0802	1	WO 2	001-	FR18	3		2	0010	119
											<						
WO	2001	0552	2.5		A.3		2002	0404									
		AE,								BB.	BG.	BR.	BY.	BZ.	CA.	CH.	
							DK,										
							IN,										
							MA,										
							SE,										
							YU,			,	,	,	,	,	,	,	
	RW:	GH,								SZ.	т7.	HG.	7.W.	AT.	BE.	CH.	
							FR.										
							CI,										TG
FR	2804															0000	
											<				_		
FR	2804	122			B1		2002	0222									
	2001						2001			AII 2	001-	3556	2		2	0010	119
***			-												_		
EP	1252	207			A2		2002	1030	1	EP 2	001-	9076	47		2	0010	119
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR.	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	
		PT.	IE.	SI.	LT.	LV.	FI,	RO,	MK.	CY.	AL.	TR					
JP	2003												72		2	0010	119
											<						
US	2003	0153	675		A1		2003	0814	1	US 2	002-	1818	21		2	0021	120
											<						
PRIORIT	Y APP	LN.	INFO	. :					1	FR 2	000-	833			A 2	0000	124
											<						
									1	WO 2	001-	FR18	3	1	W 2	0010	119
									## 2001 ER103								

ED Entered STN: 03 Aug 2001

Salt-free aqueous dispersions of water-soluble polymers containing polymeric dispersants are manufactured by radical-dispersion polymerization of monomer mixts. containing 0.5-99.5 mol (based on 100 mol monomer) CH2:CR1CO2CH(CH2NR22)? (R1 = H or Me, R2 = Me, Et, Pr, or Bu) which is quaternized on ≥ 1 N so that the 4th group on the N is alkyl or PhCH2 and the anion is halide or MeoSo3-. A typical dispersion was manufactured by radical-dispersion polymerization of 20 parts 75% aqueous CH2:CRCO2CH(CH2N-Me2CH2Ph)2 2Cl- solution, 67.5 parts 50% aqueous acrylamide solution, 28.12 parts 80% aqueous acryloyloxyethyltrimethylammonium chloride (I) solution, 3.75 parts Bu acrylate, and 0.0055 parts ethylene glycol dimethacrylate in the presence of a 76.25:3.84:0.67:19.23 I-methacrylic acid-Sipomer SEM-styrene copolymer dispersant.

IT 352201-76-4P

AB

(salt-free dispersions of water-soluble (co)polymers based on cationic monomers and containing quaternized bis(dialkylaminomethyl)methyl (meth)acrylate)

RN 352201-76-4 HCAPLUS

CN 1,3-Propanediaminium, N,N,N',N'-tetramethyl-2-(1-oxo-2-propenyl)-N,N'-bis(phenylmethyl)-, dichloride, polymer with butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), 2-propenamide and N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 352201-74-2

CMF C24 H34 N2 O . 2 C1

10/534,196

●2 C1-

CM 2

CRN 44992-01-0 CMF C8 H16 N O2 . C1

● c1 -

CM 3

CRN 141-32-2 CMF C7 H12 O2

n-Buo_U_GH_GH2

CM 4

CRN 97-90-5 CMF C10 H14 O4

CM 5

CRN 79-06-1

CMF C3 H5 N O

IC ICM COSF

CC 35-4 (Chemistry of Synthetic High Polymers)

IT Dispersing agents

(salt-free dispersions of water-soluble (co)polymers from water-soluble monomers and quaternized bis(dialkylaminomethyl)methyl

(meth)acrylate for dispersants)

IT Wetting agents

(salt-free dispersions of water-soluble (co)polymers from water-soluble monomers and quaternized bis(dialkylaminomethyl)methyl

(meth)acrylate for textile wetting agents)

2

T 352201-76-4P

(salt-free dispersions of water-soluble (co)polymers based on cationic monomers and containing quaternized bis(dialkylaminomethyl)methyl

(meth)acrylate)
REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 17 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:526119 HCAPLUS Full-text

ACCESSION NUMBER: 2001:526119 DOCUMENT NUMBER: 135:123953

TITLE: Comb polymers prepared from ATRP macromonomers

INVENTOR(S): Muehlebach, Andreas; Rime, Francois; Auschra, Clemens; Eckstein, Ernst

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT :				KIN	IND DATE				APPLICATION NO.								
WO	2001				A1		2001	0719			001-				2	0010	104	
	W: RW:	CN, GM, LR, PL, UA, GH, CY,	CR, HR, LS, PT, UG, GM, DE,	CU, HU, LT, RO, US, KE, DK,	CZ, ID, LU, RU, UZ, LS, ES,	DE, IL, LV, SD, VN, MW, FI,	AU, DK, IN, MA, SE, YU, MZ, FR,	DM, IS, MD, SG, ZA, SD, GB,	DZ, JP, MG, SI, ZW SL, GR,	EE, KE, MK, SK, SZ, IE,	BG, ES, KG, MN, SL, TZ, IT,	BR, FI, KP, MW, TJ, UG, LU,	GB, KR, MX, TM, ZW, MC,	GD, KZ, MZ, TR, AT, NL,	GE, LC, NO, TT, BE, PT,	GH, LK, NZ, TZ, CH, SE,		
CA	2394						CI, 2001											
BR	2001	0075	48		A		2002	1008		BR 2	001-	 7548 			2	0010	104	
EP	1254	185			A1		2002	1106		EP 2		9095	79		2	0010	104	

	R:										, IT,		LU,	NL,	SE,	MC,
JP	2003			51,	T T		2003				, AL, 2001-		18		2	0010104
CN	1506	390			A		2004	0623	C	N	2003-		4756		2	0010104
MX	2002	00678	32		A		2002	1023	M	IX	2002-				2	0020710
US	2003	0166	/55		A1	:	2003	0904	Ü	S	2002-		84		2	0020710
US	6936	656			В2		2005	0830								
PRIORIT			NFO	. :	-				E	P	2000-	8100	23	1	A 2	0000111
									C	N	2001-	1803	641	1	A 2	0010104
											<					
									W	О	2001-	EP53		1	v 2	0010104
											<					

ED Entered STN: 20 Jul 2001

AB Comb polymers and macromonomers based on acrylates prepared by the ATRP (Atom Transfer Radical Polymerization) method having improved capability of dispersing pigments in the given solvent can be used in compns. comprising the comb polymers and macromonomers dispersible inorg. or organic pigment particles such as inks, coating materials and be applied to any suitable substrate, such as metal, wood plastic or ceramic materials. Thus, 5% comb polymer having improved dispersant performance (formed by the copolymn. of macromer acryloyl terminated poly(Bu acrylate) and methyacrylic acid) in a alkyd/melamine based coating system can improve gloss in the final coating and give improved rheel. of the millbase.

IT 350679-82-2P

(comb polymers prepared from ATRP macromonomers)

RN 350679-82-2 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, graft (CA INDEX NAME)

CM 1

CRN 2439-35-2 CMF C7 H13 N O2

٥

CM 2

CRN 141-32-2 CMF C7 H12 O2

n-вио_С_сн__сн;

IT 281198-01-4P

10/534,196

(comb polymers prepared from ATRP macromonomers)

- RN 281198-01-4 HCAPLUS
- CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, block (9CI) (CA INDEX NAME)
 - CM 1
 - CRN 2439-35-2
 - CMF C7 H13 N O2
 - Me 2N CH2 CH2 O CH CH2
 - CM 2
 - CRN 141-32-2
 - CMF C7 H12 O2
 - п-вио_С_СН__СН2
- IT 350236-12-3P 350679-85-5P 350680-38-5P
 - (comb polymers prepared from ATRP macromonomers)
- RN 350236-12-3 HCAPLUS CN 2-Propenoic acid, but
- CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate and N,N-dimethyl-2-propenamide, graft (9CI) (CA INDEX NAME)
 - CM 1
 - CRN 2680-03-7
 - CMF C5 H9 N O
- Me2N-U-CH-CH:
 - CM 2
 - CRN 2439-35-2
 - CMF C7 H13 N O2
- Me2N-CH2-CH2-O-C-CH-CH2

```
CM 3
    CRN 141-32-2
    CMF C7 H12 O2
n-Buo-C-CH-CH2
RN 350679-85-5 HCAPLUS
CN
   2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl
    2-propenoate, graft, compd. with (chloromethyl)benzene (9CI) (CA
    INDEX NAME)
    CM 1
    CRN 100-44-7
    CMF C7 H7 C1
Ph-CH2-C1
    CM 2
    CRN 350679-82-2
    CMF (C7 H13 N O2 . C7 H12 O2)×
    CCI PMS
         CM 3
         CRN 2439-35-2
         CMF C7 H13 N O2
Me?N_CH?_CH?_O_Ü_CH__CH?
         CM 4
```

CRN 141-32-2 CMF C7 H12 O2

350680-38-5 HCAPLUS CN 2-Propenoic acid, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, graft, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME) CM 1 CRN 104-15-4 CMF C7 H8 O3 S CM 2 CRN 350679-82-2 CMF (C7 H13 N O2 . C7 H12 O2)x CCI PMS CM 3 CRN 2439-35-2 CMF C7 H13 N O2 Me2N-CH2-CH2-O-C-CH-CH2

CM 4

CRN 141-32-2 CMF C7 H12 O2

- ICM C08F293-00 IC
- ICS C08L053-00; C08L051-00; C08F002-38; C08F004-40; C09D011-00
- CC 42-12 (Coatings, Inks, and Related Products)
- Section cross-reference(s): 35

IT Coating materials Dispersing agents

Polymerization catalysts

(comb polymers prepared from ATRP macromonomers)

9003-49-0DP, Butyl acrylate homopolymer, (meth)acryloyl or Br terminated 350679-82-2P

(comb polymers prepared from ATRP macromonomers)

79-10-7DP, Acrylic acid, reaction products with polyacrylate 79-41-4DP, Methacrylic acid, reaction products with polyacrylate 1075-49-6DP, 4-Vinylbenzoic acid, reaction products with star-shaped polyacrylate 28574-59-6DP, Polydimethylaminoethyl acrylate,

methacryloyl terminated 281198-01-4P 281198-05-8P (comb polymers prepared from ATRP macromonomers)

112718-86-2P, Acrylic acid-butyl acrylate graft copolymer 116107-73-4P 150673-30-6P 350236-11-2P 350236-12-3P 350679-85-5P 350680-38-5P

(comb polymers prepared from ATRP macromonomers)

THERE ARE 9 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 18 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2001:453145 HCAPLUS Full-text

DOCUMENT NUMBER: 135:63022

TITLE: Graft copolymer with an amide functional group as

a pigment dispersant

INVENTOR(S): Ma, Sheau-Hwa

PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA

PCT Int. Appl., 33 pp. SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE:

English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	TENT NO.		DATE	APPLICATION NO.	DATE		
				WO 2000-US34200			
		CH, CY, D		DK, FI, GB, IN, JP, KR, FI, FR, GB, GR, IE, IT,			
US	6495618		20021217	US 1999-466259	19991217		
CA	2389362	A1	20010621	CA 2000-2389362	20001215		
BR	2000016768	A	20020903	BR 2000-16768	20001215		
EP	1237966	A1	20020911	EP 2000-990228	20001215		
EP	1237966 R: AT, BE, C	CH, DE, D	OK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC,		
JP	2003517063			JP 2001-544817	20001215		
AU	781733	B2	20050609	AU 2001-27281	20001215		
IN	2002MN00551	A	20060505	IN 2002-MN551	20020429		

MX 2002005944	A	20030128	MX	2002-5944		20020614
JP 2007107013	A	20070426	JP	< 2006-327425		20061204
PRIORITY APPLN. INFO.:			US	< 1999-466259	А	19991217
				<		
			JP	2001-544817	A3	20001215
				<		
			WO	2000-US34200	W	20001215
				<		

ED Entered STN: 22 Jun 2001

A polymer dispersant for pigments based on a graft copolymer wherein the graft AR copolymer has a weight average mol. weight of at least 3000 and has 10-90 parts of a polymeric backbone and 90-10 parts of macromonomer side chains attached to the backbone and wherein at least 20 parts of the polymeric backbone has attached thereto an amide group which serves as a pigment anchoring group. The backbone may also have attached thereto an addnl. pigment anchoring group selected from the group consisting of aromatic ester, aromatic amine, aliphatic amine, and quaternary ammonium groups, or mixts. thereof. These materials disperse a wide variety of pigments and are useful in solvent borne coatings where they can provide improved efficiency of pigment use, lower paint viscosity, and reduced emission of volatile organic solvent. Thus, preparing a macromonomer from Me methacrylate and Bu methacrylate by using diaquabis(borondifluorodiphenylglyoximato) cobaltate(II) as chain transfer agent and Vazo 67 (azo initiator), and polymerizing the macromonomer with N-viny1-2-pyrrolidone and 2-hydroxyethyl acrylate using tert-Bu peroctoate gave a graft copolymer which was used as dispersant for pigment with good dispersion stability.

IT 345348-93-8P 345348-95-0P 345348-97-2P

345348-98-3P

(dispersing agents; graft copolymer with amide functional group as a pigment dispersant)

N 345348-93-8 HCAPLUS

2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone, 2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate, graft (CA INDEX NAME)

CM 1

CN

CRN 2439-35-2

CMF C7 H13 N O2

CM 2

CRN 818-61-1

CMF C5 H8 O3

RN 345348-95-0 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
2-(dimethylamino)ethyl 2-propenoate, 1-ethenyl-2-pyrrolidinone,
2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate, graft,
compd. with methyl 4-methylbenzenesulfonate (CA INDEX NAME)

CM 1

CRN 80-48-8 CMF C8 H10 O3 S

CRN 345348-93-8 CMF (C8 H14 O2 . C7 H13 N O2 . C6 H9 N O . C5 H8 O3 . C5 H8 O2)x CCI PMS

CM 3

CRN 2439-35-2 CMF C7 H13 N O2

CM 4

CRN 818-61-1 CMF C5 H8 O3

CM 5

CRN 97-88-1 CMF C8 H14 O2

CM 6

CRN 88-12-0 CMF C6 H9 N O

CRN 80-62-6 CMF C5 H8 O2

RN 345348-97-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-(dimethylamino)ethyl 2-propenoate, N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2680-03-7

CMF C5 H9 N O

CM 2

CRN 2439-35-2

CMF C7 H13 N O2

CM 3

CRN 818-61-1 CMF C5 H8 O3

10/534,196

N,N-dimethyl-2-propenamide and 2-hydroxyethyl 2-propenoate, graft, compd. with methyl 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

CM

10/534,196

CMF (C7 H13 N O2 . C7 H12 O2 . C5 H9 N O . C5 H8 O3 . C5 H8 O2)× CCI PMS

CM 3

CRN 2680-03-7 CMF C5 H9 N O

Me2N_C_CH_CH2

CM 4

CRN 2439-35-2 CMF C7 H13 N O2

Me2N-CH2-CH2-O-CH-CH2

CM 5

CRN 818-61-1 CMF C5 H8 O3

но-сн2-сн2-о-Й-сн-сн2

CM 6

CRN 141-32-2

CMF C7 H12 O2

п-вио_й_сн_сн2

CM 7

CRN 80-62-6

CMF C5 H8 O2

TC TCM C08F265-10

ICS C08F271-02; C08F008-30; B01F017-00; C08L051-00

46-4 (Surface Active Agents and Detergents)

Section cross-reference(s): 35, 42

Dispersing agents

Pigments, nonbiological

(graft copolymer with amide functional group as a pigment dispersant)

345348-92-7P 345348-93-8P 345348-94-9DP, compound with N-benzylmethylamine 345348-95-0P 345348-96-1P

345348-97-2P 345348-98-3P 345664-80-4P

345664-82-6P

(dispersing agents; graft copolymer with amide functional group as a pigment dispersant)

REFERENCE COUNT: THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L50 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER:

DOCUMENT NUMBER:

2000:881084 HCAPLUS Full-text 134:49243

TITLE:

Resin composition for ink-jet recording sheet and recording sheet made with the same

INVENTOR(S): Sumita, Katsuhiko; Kataoka, Kazuya; Kawai,

Kenichi; Omura, Masava; Iseki, Aika

PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan

SOURCE: PCT Int. Appl., 140 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000074945	A1	20001214	WO 2000-JP3611 <	20000602
W: US RW: AT, BE, CH, NL, PT, SE	CY, DE	, DK, ES, I	FI, FR, GB, GR, IE, IT,	LU, MC,
JP 2000343811	A	20001212	JP 1999-158814	19990604
JP 2001121814	A	20010508	JP 1999-305781 <	19991027
JP 2001123075	A	20010508	JP 1999-305943	19991027
JP 2001146072	A	20010529	JP 1999-330510	19991119
JP 2001150804	A	20010605	JP 1999-336876 <	19991126
JP 2001171227	A	20010626	JP 1999-360016 <	19991217

JP 2001213046	Α	20010807	JP 2000-28639	20000207
JP 2001219640	A	20010814	,	20000210
EP 1114734	A1	20010711	,	20000602
R: AT, BE, CH, PT, IE, FI	DE,	DK, ES, FR, G	B, GR, IT, LI, LU,	NL, SE, MC,
PRIORITY APPLN. INFO.:			JP 1999-158814	A 19990604
			JP 1999-305781	A 19991027
			JP 1999-305943	A 19991027
			JP 1999-330510	A 19991119
			JP 1999-336876	A 19991126
			JP 1999-360016	A 19991217
			JP 2000-28639	A 20000207
			JP 2000-33986	A 20000210
				W 20000602

Entered STN: 15 Dec 2000 ED

A resin composition for ink-jet recording sheets which comprises (1) a AB cationic acrylic copolymer having crosslinkable groups, (2) a saponified vinyl acetate copolymer, and (3) a modifier and with which ink-absorbing properties and water resistance are improved. Examples of the modifier include a watercompatible polyurethane resin, a polyurethane-based graft polymer mixture, a polyester-based graft polymer mixture, and a blocked isocyanate compound With the modifier, the properties of the resin composition are regulated. Usable in place of the copolymer (1) is a cationic acrylic copolymer obtained by copolymg, a monomer having an alkylene oxide group or an acrylic copolymer obtained by copolymg, a monomer having a hydrolyzable silvl group. A solution of a cellulose derivative in a mixed solvent is applied and dried to form an image-receiving layer having a network structure. An image-receiving layer comprising a mixture of a copolymer of a monomer having an alkylene oxide group with a hot-melt adhesive is thermally transferred to a fabric after recording.

<--

IT 210779-65-0P, A 174-Butvl acrylate-Blemmer PE 200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer 210779-66-19, Acrylic acid-A 174-Butyl acrylate-Blemmer PE 200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer 313057-77-1P. Butvl methacrylate-diethylaminoethyl methacrvlate-methvl methacrvlate-3-(trimethoxysilvl)propvl methacrylate copolymer

(resin composition for ink-jet recording sheet from)

RN 210779-65-0 HCAPLUS CN

2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, $\alpha - (2-\text{methyl}-1-\text{oxo}-2-\text{propenyl}) - \omega - \text{hydroxypoly}(\text{oxy}-1,2$ ethanediv1) and 3-(trimethoxysilv1)propv1 2-methy1-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

$$\mathsf{Me} = \mathsf{C} = \mathsf{C} = \mathsf{C} = \mathsf{CH}_2 = \mathsf{CH}$$

RN 210779-66-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate,

a-(2-methyl-1-oxo-2-propenyl)-0-hydroxypoly(oxy-1,2-ethanediyl), 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 25736-86-1

CMF (C2 H4 O)n C4 H6 O2

CCI PMS

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 3

CRN 141-32-2

CMF C7 H12 O2

CM 4

CRN 105-16-8

CMF C10 H19 N O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 313057-77-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl

2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2530-85-0

CMF C10 H20 O5 Si

CM 2

CRN 105-16-8

CMF C10 H19 N O2

CM

CRN 97-88-1 CMF C8 H14 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

IC B41M005-00

 ${\tt CC} - 74\text{--}6$ (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35, 38

II 210779-65-0P, A 174-Butyl acrylate-Blemmer PE 200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer 210779-66-1P, Acrylic acid-A 174-Butyl acrylate-Blemmer PE 200-diethylaminoethyl methacrylate-Methyl methacrylate copolymer 313057-77-1P, Butyl methacrylate-diethylaminoethyl

methacrylate-methyl methacrylate-3-(trimethoxysilyl)propyl

methacrylate copolymer

(resin composition for ink-jet recording sheet from)

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L50 ANSWER 20 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2000:50080 HCAPLUS Full-text

DOCUMENT NUMBER: 132:93817

TITLE: Producing amphoteric resin as dispersant or binder for pigments used in weather-resistant paints and

inks
INVENTOR(S): Tamazawa, Mitsuo; Kuroda, Yasuo

PATENT ASSIGNEE(S): Taisei Chemical Industries Ltd., Japan

SOURCE: Eur. Pat. Appl., 18 pp.

Patent

CODEN: EPXXDW

DOCUMENT TYPE: LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.					D	DATE		APPLICATION NO.					DATE		
EP	9727				A1	-	2000	0119	EP	1999-					19990713	
EP	9727 R:					FR,	GB, G			LU,	NL,	SE	, MC,			
JP	2963		IE,	SI,	LT, B2	LV,	, FI, 1999		JP	1998-		44			19980715	
	2000		60		A		2000		3.77	1999-	2055	21			19990713	
	6174				л В1		2003					-			19990713	
PRIORIT			TNFO		-		2001	0110					,		19980715	
													•	-		

Entered STN: 21 Jan 2000

An amphoteric resin is made by graft copolymg, on the main chain of an α, β ethylenically unsatd. component C, a copolymerizable basic prepolymer A2 which is obtained by reacting together (i) a prepolymer Al which is obtained by polymerization of a first α , β -ethylenically polymerizable compound and a polymerization initiator containing a terminal carboxyl group, and (ii) a compound having an epoxy group such as glycidyl (meth)acrylate, in an amount 0.1-1.0 equiv to the amino group equivalent of the prepolymer Al; and an α, β ethylenically polymerizable acidic prepolymer B2, which is obtained by an analogous procedure to prepare A2. The resulting resin has superior dispersibility for functional compds. such as various pigments and improved weather resistance. A well dispersed pigment used as a binder the graft copolymer (preparation given) of acrylic acid, Bu acrylate, cyclohexyl methacrylate, dimethylaminoethyl methacrylate, glycidyl methacrylate, 2hydroxyethyl methacrylate, and Me methacrylate.

255052-89-2P, Acrylic acid-butyl acrylate-cyclohexyl IΤ methacrylate-N, N-dimethylaminoethyl methacrylate-glycidyl methacrylate-2-hydroxyethyl methacrylate-2-methacryloyloxyethyl phthalic acid-methyl methacrylate graft copolymer (producing amphoteric resin as dispersant or binder for pigments used in weather-resistant paints and inks)

RN 255052-89-2 HCAPLUS CN

1,2-Benzenedicarboxvlic acid, mono[2-[(2-methvl-1-oxo-2propenyl)oxy]ethyl] ester, polymer with butyl 2-propenoate, cyclohexyl 2-methyl-2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM

1 CRN 27697-00-3 CMF C14 H14 O6

$$\underbrace{ \begin{bmatrix} \begin{smallmatrix} 0 \\ L \\ C \end{smallmatrix} - 0 - CH_2 - CH_2 - 0 - \underbrace{ \begin{smallmatrix} 0 \\ L \\ C \end{smallmatrix} - \underbrace{ \begin{smallmatrix} CH_2 \\ L \\ C - Me} \end{smallmatrix} }_{CO_2H}$$

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 106-91-2 CMF C7 H10 O3

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CM 6
    CRN 101-43-9
     CMF C10 H16 O2
     CM
    CRN 80-62-6
     CMF C5 H8 O2
 we_U_U_U_
    CM
    CRN 79-10-7
     CMF C3 H4 O2
ΙĊ
     ICM C08F290-04
     ICS C08F290-12; C09D151-00
    35-4 (Chemistry of Synthetic High Polymers)
    Dispersing agents
     Pigments, nonbiological
        (producing amphoteric resin as dispersant or binder for pigments
        used in weather-resistant paints and inks)
     255052-89-2P, Acrylic acid-butyl acrylate-cyclohexyl
     methacrylate-N, N-dimethylaminoethyl methacrylate-glycidyl
     methacrylate-2-hydroxyethyl methacrylate-2-methacryloyloxyethyl
     phthalic acid-methyl methacrylate graft copolymer
        (producing amphoteric resin as dispersant or binder for pigments
       used in weather-resistant paints and inks)
REFERENCE COUNT:
                              THERE ARE 4 CITED REFERENCES AVAILABLE FOR
                        4
```

CC

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

10/534.196

Electrolyte stability of the MBHD copolymer latex

RE FORMAT

L50 ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1999:723884 HCAPLUS Full-text

ACCESSION NUMBER: 1999:723884 HCAPLI DOCUMENT NUMBER: 132:279594

TITLE: AUTHOR(S):

AUTHOR(S): Yu, Zhangqing; Li, Bogeng; Pan, Zuren
CORPORATE SOURCE: Institute of Chemical Engineering, South China
University of Technology, Peop. Rep. China
SOURCE: Huanan Ligong Daxue Xuebao, Ziran Kexueban (

1999), 27(9), 117-121

CODEN: HLDKEZ; ISSN: 1000-565X

PUBLISHER: Huanan Ligong Daxue Xuebao Bianji Weiyuanhui

DOCUMENT TYPE: Journal LANGUAGE: Chinese

ED Entered STN: 14 Nov 1999

AB The MBHD copolymer latex of Me methacrylate, Bu acrylate, hydroxyethyl methacrylate (HEMA) and dimethylaminoethyl methacrylate (DMAEMA) is synthesized. The effects of the monomer feed rate, polymerization temperature, the weight ratio of the non-ionic to anionic emulsifier, the emulsifier content, and the content of the HEMA and DMAEMA on the electrolyte stability of the latex are investigated. The results show that a higher content of the HEMA, DNAEMA, and the emulsifiers is favorable for the electrolyte stability of the latex. The introduction of the monomer HEMA may improve the electrolyte stability of the copolymer latex because of the higher hydrophilicity of the particles. Raising polymerization temperature is also beneficial to the electrolyte stability of the latex due to the fact that bigger particles are formed. The electrolyte stability of the latex prepared by batch process is worse than that prepared by semi-continuous process.

by Datch process is worse than that prepared by Semi-Continuous process.

IT 12122-73-78, Butyl acrylate-dimethylaminoethyl
methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer
(preparation and electrolyte stability of Bu acrylate-dimethylaminoethyl
methacrylate-hydroxyethyl methacrylate-Me methacrylate copolymer

latex) RN 72122-73-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2



CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

n-вио_0_сн_сн2

CM 4

CRN 80-62-6 CMF C5 H8 O2

H2C 0

- CC 35-4 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 42, 46
- IT Emulsifying agents
- (anionic, SLS; electrolyte stability of MBHD copolymer latex)
- IT Emulsifying agents
- (nonionic, OP-10; electrolyte stability of MBHD copolymer latex)
- IT 72122-73-7P, Butyl acrylate-dimethylaminoethyl

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer
 (preparation and electrolyte stability of Bu acrylate-dimethylaminoethyl
methacrylate-hydroxyethyl methacrylate-Me methacrylate copolymer
latex)

L50 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1999:698156 HCAPLUS Full-text

DOCUMENT NUMBER: 131:315878

TITLE: Cationic emulsions obtained by radical

polymerization and ink-jet printing sheets

containing them

INVENTOR(S): Torii, Nobuhiro; Umemura, Yutaka; Michimoto,

Masahiro

PATENT ASSIGNEE(S): Mitsubishi Paper Mills, Ltd., Japan; Chuo Rika

Kogyo K. K.

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

10/534.196

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11302337	A	19991102	JP 1998-107715	19980417
			<	
JP 3490290	B2	20040126		
PRIORITY APPLN. INFO.:			JP 1998-107715	19980417
			/	

- ED Entered STN: 02 Nov 1999
- AB The emulsions are obtained by radical polymerization of tertiary and/or quaternary amino-containing radically polymerizable monomers and comonomers in the presence of EVA aqueous emulsions. The printing sheets contain the emulsions as white pigment layers, mirror layers, or internal layers. The emulsions show good storage stability and give ink-jet printing paper with good water resistance and high resolution
- IT 62470-14-8P 80044-52-6P, Butyl acrylate-dimethylaminoethyl acrylate-methyl methacrylate copolymer 154500-22-8P

(cationic emulsions obtained by radical polymerization for high-resolution ink-jet printing paper)

- RN 62470-14-8 HCAPLUS
- CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propencate and methyl 2-methyl-2-propencate (CA INDEX NAME)
 - CM 1
 - CRN 5039-78-1
 - CMF C9 H18 N O2 . C1

- c1-
- CM 2
- CRN 141-32-2 CMF C7 H12 O2
- n-Buo_C_CH__CH2
 - CM 3
 - CRN 80-62-6 CMF C5 H8 O2

RN 80044-52-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-(dimethylamino)ethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 2439-35-2

CMF C7 H13 N O2

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 80-62-6

CMF C5 H8 O2

RN 154500-22-8 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 44992-01-0

CMF C8 H16 N O2 . C1

Tembou, Nzudie Denis; Collette, Christian

Stable aqueous dispersions based on water-soluble polymers containing a cationic polymeric

131:88320

DOCUMENT NUMBER:

INVENTOR(S):

TITLE:

10/534.196

PATENT ASSIGNEE(S): Elf Atochem S. A., Fr.

SOURCE: Fr. Demande, 13 pp. CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

E	PAT	ENT	NO.			KIN	D	DATE		A	PE	PLICAT	ION	NO.		D	ATE
E	FR	2770	526			A1	-	1999	0507	F	R	1997-	1385	9		1	9971104
F	PR.	2770	526			В1		2000	0114								
E	ΞP	9151	03			A1		1999	0512	E	Ρ	1998-	4026	67		1	9981027
												<					
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GF	R, IT,	LI,	LU,	NL,	SE,	MC,
			PT,	ΙE,	SI,	LT,	LV,	FI,	RO								
Ţ	JS	6225	395			B1		2001	0501	U	S	1998-	1826	51		1	9981030
												<					
P	ΑU	9890	528			A		1999	0603	A	U	1998-	9052	8:		1	9981102
												<					
P	ΑU	7196	94			B2		2000	0518								
N	10	9805	127			A		1999	0505	N	0	1998-	5127	7		1	9981103
(CN	1224	727			A		1999	0804	C	Ν	1998-	1258	324		1	9981104
												<					
Ċ	JΡ	1121	7410			A		1999	0810	J.	Ρ	1998-	3138	310		1	9981104
												<					
PRIORI	ITY	APP	LN.	INFO	. :					F	R	1997-	1385	9		A 1	9971104
												-					

ED Entered STN: 27 Jul 1999

Low-viscosity, highly concentrated, stable aqueous dispersion of water-soluble AB polymers are manufactured in the presence of polymeric dispersants containing repeating units of ≥1 water-soluble monomer 15-99, repeating units of ≥1 water-insol, monomer 1-85, and repeating units of ≥1 amphiphilic monomer. A typical dispersant was manufactured by radical polymerization of 140 parts styrene with 175 parts 80% aqueous solution of acryloyloxyethyltrimethylammonium chloride in an EtOH-MEK mixture

211106-71-79

TT

(stable aqueous dispersions based on water-soluble polymers containing a cationic polymeric dispersant having hydrophobic groups) 211106-71-7 HCAPLUS

RN CN

Benzenemethanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with butyl 2-propenoate and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 46830-22-2

CMF C14 H20 N O2 . C1

E. I. Du Pont de Nemours & Co., USA

Eur. Pat. Appl., 9 pp. CODEN: EPXXDW

PATENT ASSIGNEE(S):

SOURCE:

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 928821 A1 19990714 EP 1999-100011 19990104

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,

PT, IE, SI, LT, LV, FI, RO

Patent

ED Entered STN: 27 Jul 1999

Two-phase ink jet ink compns. have an aqueous continuous phase containing water and an ionic component and a non-aqueous and discontinuous phase containing a non-aqueous vehicle, a colorant and an ionic polymer, wherein the ionic polymer functions as a dispersant and a binder and has a ionic charge opposite that of the ionic component in the aqueous phase. Preparing a 75/5/20 ethylhexyl methacrylate-iso-Bu methacrylate-hydroxyethyl methacrylate (I) macromer, adding Vazo 88 2.5, PhMe 19, Me methacrylate 37, styrene 10, Et acrylate 26, I 20, and dimethylaminothyl methacrylate 7 g to a kettle containing 67.4 g of the macromer and 65 g PhMe, heating to 100°, milling the block copolymer 37, cyan pigment (BT 617D) 19, and Bu cellosolve 44 g, mixing (25 g) with 4.9 g citric acid and 30.9 g water, and stirring with water 16.4, imidazolidone 31, and ethylene glycol 25 g gave an ink. The ink was printed using an ink jet printer onto a cotton fabric, showing good washfastness.

/---

IT 229948-05-4P, Ethylhexyl methacrylate-isobutyl methacrylate-hydroxyethyl methacrylate-methyl methacrylate-stvrene-ethyl acrylate-dimethylaminoethyl methacrylate

methacrylate-styrene-ethyl acrylate-dimethylaminoethyl methacrylate block copolymer citric acid salt (binder and dispersant; two-phase pigmented ink jet inks containing

(binder and dispersant; two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)

RN 229948-05-4 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate, ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate, block, 2-hydroxyl-1,2,3-propanetricarboxylate (salt) (9C1) (CA INDEX NAME)

CM 1

CRN 77-92-9 CMF C6 H8 O7

CWE, CP H8 O

CM 2

CRN 229948-04-3

10/534,196

CMF (C12 H22 O2 . C8 H15 N O2 . C8 H14 O2 . C8 H8 . C6 H10 O3 . C5 H8 02 . C5 H8 O2)x CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

CM 4

CRN 868-77-9 CMF C6 H10 O3

CM 5

CRN 688-84-6

CMF C12 H22 O2

CM 6

CRN 140-88-5 CMF C5 H8 O2

CM 7

CRN 100-42-5 CMF C8 H8

H2C=CH-Ph

CM 8

CRN 97-86-9 CMF C8 H14 O2

CM 9

CRN 80-62-6 CMF C5 H8 O2

H2C Me_II_II_OMe

IC ICM C09D011-00

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 40

тт Textiles

(cotton; two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)

Textile printing

(two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)

229948-05-4P, Ethylhexyl methacrylate-isobutyl methacrylate-hydroxyethyl methacrylate-methyl

methacrylate-styrene-ethyl acrylate-dimethylaminoethyl methacrylate block copolymer citric acid salt

(binder and dispersant; two-phase pigmented ink jet inks containing acrylic ionomers as dispersant and binder)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L50 ANSWER 25 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:393337 HCAPLUS Full-text DOCUMENT NUMBER: 131:158868

TITLE: Stability of the GHD latex crosslinkable at

10/534.196

ambient temperature

AUTHOR(S): Yu, Zhang-Qing; Li, Bo-Geng; Li, Bao-Fang; Pan,

CORPORATE SOURCE: Inst. Chem. Eng., South China Univ. Technol.,

Canton, 510641, Peop. Rep. China

SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1999), 20(6), 978-983

CODEN: KTHPDM; ISSN: 0251-0790

PUBLISHER: Gaodeng Jiaovu Chubanshe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

Entered STN: 28 Jun 1999 ED AB

The glycidyl methacrylate (GMA)-hydroxyl methacrylate (HEMA)dimethylaminoethyl methacrylate (DMAEMA) copolymer latex (GHD) which is crosslinkable at ambient temperature, was synthesized. In presence of the seed latex of Me methacrylate (MMA)-Bu acrylate (BA)-GMA, the effect of the polymerization technol, and the recipes on the process stability of the emulsion copolymn. of MMA-BA-HEMA-DMAEMA and the shelf life of the obtained crosslinkable latex were studied. The process stability and the shelf life of the latex were improved as more emulsifier was used. When the polymerization temperature is raised, the process stability becomes worse because the crosslinking coagulation is increased, but the shelf life of the latex becomes longer because of the smaller particles and the lower surface tension. Raising the glass transition temperature (Tg) of the seed polymer can depress the crosslinking coagulation during the copolymn, and improve the process stability. Increasing the content of HEMA and DMAEMA has little effect on the process stability but it reduces the shelf life of the latex. When the functional groups are separated through the particle designing, the latex with acceptable shelf life is obtained. The crosslinking coaqulation among functional groups may be the key factor which dets. the process stability and the shelf life of the latex crosslinked at ambient temperature Coating methacrylate copolymer self crosslinkable.

IΤ 72122-73-7P, Butyl acrylate-dimethylaminoethyl

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer (latex; preparation and stability of room-temperature crosslinkable) 72122-73-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

RN

CRN 2867-47-2

CMF C8 H15 N O2

CM 2

CRN 868-77-9

CMF C6 H10 O3

CM 3

CRN 141-32-2 CMF C7 H12 O2

- CH------ CH2

CM

CRN 80-62-6 CMF C5 H8 O2

H₂C we_II_II_

CC 42-7 (Coatings, Inks, and Related Products) Section cross-reference(s): 35

Emulsifying agents

(OP 10 and sodium laurylsulfate; preparation and stability of roomtemperature

crosslinkable Bu acrylate-dimethylaminoethyl methacrylate-Me methacrylate-2-hydroxyethyl methacrylate copolymer latex)

72122-73-7P, Butyl acrylate-dimethylaminoethyl

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer (latex; preparation and stability of room-temperature crosslinkable)

L50 ANSWER 26 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER. 1999:349445 HCAPLUS Full-text

DOCUMENT NUMBER: 131:144899

TITLE: Stability of emulsion copolymerization system of

MMA-BA-DMAEMA

AUTHOR(S): Yu, Zhang-Qing; Li, Bog-Eng; Li, Bao-Fang; Pan, Zu-Ren

CORPORATE SOURCE: Institute of Polymer Science & Technology,

Zhejiang Univ., Hangzhou, 310027, Peop. Rep. China

SOURCE: Zhejiang Daxue Xuebao, Ziran Kexueban (

1999), 33(1), 57-62

CODEN: ZDXKE5; ISSN: 0253-9861

PUBLISHER: Zhejiang Daxue Journal

DOCUMENT TYPE: LANGUAGE: Chinese ED Entered STN: 08 Jun 1999

10/534,196

- The terpolymer latex of MMA-BA-DMAEMA was prepared in both batch and semi-AB continuous emulsion copolymns. The effects of emulsifier type and concentration, polymerization temperature, the feed policy and feed rate of emulsified monomer on the stability of polymerization system were studied systematically. The HLB is not a critical value for selecting the emulsifier used in the emulsion polymerization containing DMAEMA. The available method for determining emulsifier system is still directly by the stability observation in the polymerization runs. The emulsifier type is a key factor influencing the stability of polymerization system. An increase in the emulsifier concentration and a decrease of polymerization temperature improved the stability of polymerization system. The content of functional monomer DMAEMA does not affect the stability of polymerization system obviously. A reduction of the feed rate of the emulsified monomers is favorable to the stability of polymerization system. The stability of batch polymerization is better than that of semi-continuous polymerization for this system, but the seeded and unseeded semi-continuous emulsion polymerization processes are similar in polymerization stability.
- IT 35166-02-0P, Butyl acrylate-dimethylaminoethyl

methacrylate-methyl methacrylate copolymer

(stability of emulsion copolymn. system of MMA, BA, and dimethylaminoethyl methacrylate with different emulsifiers)

RN 35166-02-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2



CC 35-4 (Chemistry of Synthetic High Polymers)

IT Emulsifying agents

(stability of emulsion copolymn. system of MMA, BA, and dimethylaminoethyl methacrylate with different emulsifiers)

IT 35166-02-0P, Butyl acrylate-dimethylaminoethyl methacrylate-methyl methacrylate copolymer

(stability of emulsion copolymn. system of MMA, BA, and dimethylaminoethyl methacrylate with different emulsifiers)

L50 ANSWER 27 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1999:56817 HCAPLUS Full-text

DOCUMENT NUMBER: 130:160642

TITLE: Manufacture of electrophotographic toner with

stable positive chargeability
INVENTOR(S):
PATENT ASSIGNEE(S):
Nippon Zeon Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11015192	A	19990122	JP 1997-183014	19970624
			<	
JP 3255088	B2	20020212		
PRIORITY APPLN. INFO.:			JP 1997-183014	19970624
			/	

- ED Entered STN: 27 Jan 1999
- AB A monomer is suspension polymerized in the presence of (A) 0.01-10 parts (based on 100 parts of the monomer) a copolymer from (al) a (meth)acrylate monomer having a quaternary ammonium salt group, (a2) a (meth)acrylate monomer, and (a3) an aryl-containing vinylic monomer, (B) a colorant, and (C) 0.01-10 parts an inorg. cationic dispersant. The copolymer A shows polystyrene-converted Mw (by GPC in THF) 25,000-1,000,000 and includes the alderived unit 0.01-0.4 mol%.
- IT 220170-89-8P 220170-90-1P

(charge controlling agent; electrophotog, toner including quaternary-ammonium-salt-containing acrylic polymer and showing stable chargeability)

- RN 220170-89-8 HCAPLUS
- CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-l-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with butyl 2-propenoate and ethenylbenzene (901) (CA INDEX NAME)
 - CM 1
 - CRN 46917-07-1
 - CMF C15 H22 N O2 . C1

$$\begin{array}{c} \text{Me} \\ \text{Ph-CH}_2 - \begin{array}{c} \text{N+} \\ \text{N+} \\ \text{Me} \end{array} \\ \text{CH}_2 - \text{CH}_2 - \text{O-L-L-Me} \end{array}$$

● c1-

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 100-42-5

CMF C8 H8

H2C == CH = Ph

RN 220170-90-1 HCAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 1,4-butanediyl di-2-propenoate, butyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 46917-07-1

CMF C15 H22 N O2 . C1

$$\begin{array}{c} \text{Me} & \text{O} & \text{CH}_2\\ \text{Ph-CH}_2 & \text{N}^+ & \text{CH}_2 - \text{CH}_2 - \text{O} & \text{L}^- & \text{Me} \\ \text{Me} & \text{Me} & \text{O} & \text{CH}_2 & \text{CH}_$$

● C1 -

CM 2 CRN 1070-70-8 CMF C10 H14 O4 Ü_0_(CH2)4—0-CM 3 CRN 141-32-2 CMF C7 H12 O2 n-Bu0_U_CH_CH2 CM 4 CRN 100-42-5 CMF C8 H8 H2C==CH=Ph ICM G03G009-087 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 35 Dispersing agents (cationic; electrophotog. toner including quaternary-ammonium-salt-containing acrylic polymer and showing stable chargeability) 220170-89-8F 220170-90-1P (charge controlling agent; electrophotog, toner including quaternary-ammonium-salt-containing acrylic polymer and showing stable chargeability) L50 ANSWER 28 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:629082 HCAPLUS Full-text DOCUMENT NUMBER: 130:4140 TITLE: Factors affecting particle size and its distribution of MMA-BA-DMAEMA copolymer emulsion

Yu, Zhangqing; Li, Bogeng; Pan, Zuren

Institute of Polymer Science and Engineering, Zhejiang University, Hangzhou, 310027, Peop. Rep.

AUTHOR(S):

CORPORATE SOURCE:

10/534,196

China

SOURCE: Tuliao Gongye (1997), (5), 5-6 CODEN: TLKYD5; ISSN: 0253-4312

PUBLISHER: Huagongbu Tuliao Gongye Yanjiuso
DOCUMENT TYPE: Journal

LANGUAGE: Chinese ED Entered STN: 06 Oct 1998

AB The MMA (Me methacrylate)-BA (Bu acrylate)-DMAEMA (dimethylaminoethyl methacrylate) copolymer emulsion was prepared with batch or semi-continuous emulsion polymerization process. The effect of compound emulsifier ratio and amount, reaction temperature, polymerization type, and amount of functional monomers on the emulsion resin particle size and size distribution was

studied. II 35166-02-09, Butvl acrylate-N,N-dimethylaminoethyl

methacrylate-methyl methacrylate copolymer

(factors affecting particle size and distribution of Me methacrylate-Bu acrylate-dimethylaminoethyl methacrylate copolymer emulsion)

RN 35166-02-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

CMF C8 H15 N O2

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

H2C 0 Me_____OMe

10/534.196

35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 37

тт Emulsifying agents

(effect on particle size and distribution of Me methacrylate-Bu acrylate-dimethylaminoethyl methacrylate copolymer emulsion)

35166-02-0P, Butyl acrylate-N, N-dimethylaminoethyl

methacrylate-methyl methacrylate copolymer

(factors affecting particle size and distribution of Me

methacrylate-Bu acrylate-dimethylaminoethyl methacrylate copolymer emulsion)

L50 ANSWER 29 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:217349 HCAPLUS Full-text

DOCUMENT NUMBER: 128:326301

ORIGINAL REFERENCE NO.: 128:64599a

Hair cosmetic compositions TITLE:

INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji; Ito, Kayo; Hayama, Kazuhide

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan; Mitsubishi Chemical Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10087439	A	19980407	JP 1996-239409	19960910
JP 3620163 US 6375932	B2 B1	20050216 20020423	US 1997-925669	19970909
CN 1176094	A	19980318	< CN 1997-118471 <	19970910
CN 1151769 PRIORITY APPLN. INFO.:	С	20040602	JP 1996-239406	A 19960910
			•	A 19960910
			JP 1996-244910 <	A 19960917
			JP 1996-246055 <	A 19960918

- Entered STN: 17 Apr 1998 ED
- AB Hair cosmetic compns. showing excellent hair treatment effects contain: (A) amine oxide group-containing copolymers having mol. weight 10,000-500,000 and (B) anionic polymers such as Diahold LP 503 and Gantrez ES-225 [in which A/B = 1/10 - 10/1 and A + B = 0.1 - 10 weight%]. Raix appeared soft after treatment.
 - 118037-65-3DP, oxidation products (hair cosmetic compns.)
- RN
- 118037-65-3 HCAPLUS
- 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

Me2N-CH2-CH2-O-U-Me

CM 2

CRN 97-86-9 CMF C8 H14 O2

 $_{\mathrm{i-Buo}} = \overset{\circ}{\mathbb{L}} = \overset{\mathrm{CH}_{2}}{\mathbb{L}} = \overset{\mathrm{CH}_{2}}{\mathbb{L}}$

CM 3

CRN 80-62-6 CMF C5 H8 O2

H2C O Me_C_C_OMe

IC ICM A61K007-06

CC 62-3 (Essential Oils and Cosmetics) Section cross-reference(s): 38

Section cross-reference(s): 38

IT 41510-85-4DP, oxidation products 118037-65-3DP, oxidation products (hair cosmetic compns.)

L50 ANSWER 30 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:214448 HCAPLUS Full-text

DOCUMENT NUMBER: 128:326300

ORIGINAL REFERENCE NO.: 128:64598h,64599a TITLE: Hair cosmetics

INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji;

Ito, Kayo; Hayama, Kazuhide

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan;

Mitsubishi Chemical Corp.
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

10/534.196

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 10087442	Α	19980407	JP 1996-244910 <		19960917
JP 3620164	B2	20050216			
US 6375932	B1	20020423	US 1997-925669 <		19970909
CN 1176094	A	19980318	CN 1997-118471 <		19970910
CN 1151769	С	20040602			
PRIORITY APPLN. INFO.:			JP 1996-239406 <	A	19960910
			JP 1996-239409 <	A	19960910
			JP 1996-244910 <	A	19960917
			JP 1996-246055	A	19960918

Entered STN: 16 Apr 1998

AB Hair cosmetics showing excellent hair treatment effects comprise: (A) amine oxide-containing polymers having average mol weight of 10,000-500,000 and (B) cationic polymers [in which A/B = 1/10 - 10/1 and A + B = 0.1-10 weight%]. A hair spray comprised amine oxide-containing polymer 2.5, UCARE Polymer JR-400 0.5, purified water 45.0, and ethanol to 100 weight%. Rair appeared soft after treatment.

- 68714-76-1DP, reaction products with di-Me sulfate 118037-65-3DP, oxidation products
- (hair cosmetics)
- 68714-76-1 HCAPLUS RN
- CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 32360-05-7 CMF C22 H42 O2

CM

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

IC ICM A61K007-06

ICS A61K007-11

CC 62-3 (Essential Oils and Cosmetics)
 Section cross-reference(s): 38

IT 41510-85-4DP, oxidation products 68714-76-1DP, reaction products with di-Me sulfate 118037-65-3DP, oxidation products (hair cosmetics)

L50 ANSWER 31 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:214447 HCAPLUS Full-text

DOCUMENT NUMBER: 128:326299

ORIGINAL REFERENCE NO.: 128:64595a,64598a

TITLE: Hair cosmetic compositions

INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji; Ito, Kayo; Hayama, Kazuhide

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan;

Mitsubishi Chemical Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 10087438	Α	19980407	JP 1996-239406		19960910
JP 3620162	B2	20050216			
US 6375932	B1	20020423	US 1997-925669 <		19970909
CN 1176094	A	19980318	CN 1997-118471 <		19970910
CN 1151769	С	20040602			
PRIORITY APPLN. INFO.:			JP 1996-239406 <	A	19960910
			JP 1996-239409	A	19960910
			JP 1996-244910	A	19960917
			JP 1996-246055	Α	19960918

ED Entered STN: 16 Apr 1998

IT 118037-65-3DF, oxidation products

AB Hair cosmetics showing excellent hair treatment effects comprise: (A) amine oxide-containing polymers having average mol weight of 10,000-500,000 and (B) nonionic polymers [in which A/B = 1/10 - 10/1 and A + B = 0.1-10 weight%]. A hair gel comprised amine oxide-containing polymer 2.5, Luviskol VA64 1.0, purified water 20.0, and ethanol to 100 weight %. Hair appeared soft after treatment.

(hair cosmetics)

RN 118037-65-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 97-86-9 CMF C8 H14 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

IC ICM A61K007-06

CC 62-3 (Essential Oils and Cosmetics) Section cross-reference(s): 38

IT 41510-85-4DP, oxidation products 72018-12-3P 118037-65-3DP,
 oxidation products
 (hair cosmetics)

L50 ANSWER 32 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:210616 HCAPLUS Full-text

DOCUMENT NUMBER: 128:326298
ORIGINAL REFERENCE NO.: 128:64595a,64598a

TITLE: Hair cosmetic compositions

INVENTOR(S): Hiwata, Tomoaki; Kitani, Yasuo; Narasaki, Kanji;
Ito, Kayo; Hayama, Kazuhide

PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Ltd., Japan

10/534,196

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF Patent

DOCUMENT TYPE: LANGUAGE:

GUAGE: Japanese

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
JP 10087443	A	19980407	JP 1996-246055		19960918
			<		
JP 3620165	B2	20050216			
US 6375932	B1	20020423	US 1997-925669		19970909
			<		
CN 1176094	A	19980318	CN 1997-118471		19970910
			<		
CN 1151769	C	20040602			
PRIORITY APPLN. INFO.:			JP 1996-239406	А	19960910
			<		
			JP 1996-239409	A	19960910
			<		
			JP 1996-244910	А	19960917
			<		1330031
			JP 1996-246055	А	19960918
			<		1000010

ED Entered STN: 15 Apr 1998

AB Hair cosmetics showing excellent hair treatment effects comprise: (A) amine oxide-containing polymers having average mol weight of 10,000-500,000 and (B) amphoteric polymers [in which A/B = 1/10 - 10/1 and A + B = 0.1-10 weight %]. A hair foam comprised amine oxide-containing polymer 2.5, Yukaformer AMPHOSET 0.5, purified water 45, and ethanol to 100 weight %. Hair appeared soft after treatment.

- IT 118037-65-3DP, oxidation products (hair cosmetics)
- RN 118037-65-3 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with methyl 2-methyl-2-propenoate and 2-methylpropyl 2-methyl-2-propenoate (9C1) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

0 CH2 Me2N-CH2-CH2-0-CH2

CM 2

CRN 97-86-9

CMF C8 H14 O2

CM

CRN 80-62-6 CMF C5 H8 02

IC ICM A61K007-06

ICS A61K007-11

CC 62-3 (Essential Oils and Cosmetics) Section cross-reference(s): 38

IT 41510-85-4DP, oxidation products 118037-65-3DP, oxidation products (hair cosmetics)

L50 ANSWER 33 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1998:209696 HCAPLUS Full-text

ACCESSION NUMBER: 1998:209696 HCAPLUS Full-text
DOCUMENT NUMBER: 128:217869

DOCUMENT NUMBER: 128:21/869

ORIGINAL REFERENCE NO.: 128:43165a,43168a

TITLE: Stability of emulsion copolymerization of acrylic monomers containing amino and hydroxyl groups

AUTHOR(S): Yu, Zhang-Qing; Li, Bo-Geng; Li, Bao-Fang; Pan, Zu-Ren

CORPORATE SOURCE: Institute Polymer Science Engineering, Zhejiang

University, Hangzhou, 310027, Peop. Rep. China

SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1998),

19(3), 472-476

CODEN: KTHPDM; ISSN: 0251-0790

PUBLISHER: Gaodeng Jiaoyu Chubanshe

DOCUMENT TYPE: Journal LANGUAGE: Chinese

ED Entered STN: 15 Apr 1998

AB The copolymer latex of MMA-BA-HEMA-DMAEMA (Me methacrylate-Bu acrylatehydroxyethyl methacrylate-dimethylaminoethyl methacrylate) was prepared in the batch and semi-continuous emulsion copolymn. process. The effects of emulsifier type and concentration, polymerization temperature and the feeding rate of emulsified monomer on the stability of polymerization were studied systematically. The HLB is not critical parameter for selecting the emulsifier used for the emulsion polymerization containing water-soluble monomers. The available method for determining emulsifier system is still directly by the stability observation of the polymerization runs. The increase of functional monomer HEMA and DMAEMA content is beneficial to polymerization stability. The decrease of the polymerization temperature and the reduction of the feeding rate of the emulsified monomers are favorable to the stability of polymerization The stability of batch polymerization is inferior to that of semi-continuous polymerization for this system. The increase of the emulsifier concentration will improve the stability of polymerization and uniform the particle size.

T 72122-73-7P, Butyl acrylate-dimethylaminoethyl

10/534,196

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer (stability of emulsion copolymn. of acrylic monomers containing amino and hydroxyl groups)

RN 72122-73-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 141-32-2

CMF C7 H12 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

CHE CO NO OZ

10/534.196

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 35

IT Emulsifying agents

(effect on stability of emulsion copolymn. of acrylic monomers containing amino and hydroxyl groups)

IT 72122-73-7P, Butyl acrylate-dimethylaminoethyl

methacrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer (stability of emulsion copolymn. of acrylic monomers containing amino and hydroxyl groups)

L50 ANSWER 34 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1997:701705 HCAPLUS Full-text

DOCUMENT NUMBER: 127:307807

ORIGINAL REFERENCE NO.: 127:60211a,60214a

TITLE: Emulsion polymerization composition for

impregnation of paper for increased strength
INVENTOR(S): Watanabe, Minoru; Yamaguchi, Yasuhiro; Tsukiyama,

Fumitoshi

PATENT ASSIGNEE(S): Showa Highpolymer Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09279084	A	19971028	JP 1996-118413	19960416
			<	
PRIORITY APPLN. INFO.:			JP 1996-118413	19960416
			<	

- ED Entered STN: 07 Nov 1997
- AB Title composition providing good dry and wet tensile strength and folding endurance is prepared by emulsion polymerization of dialkylaminoalkyl(meth)acrylate 0.1-10, (meth)acrylamide 0.1-30, and itaconic acid 0.1-10% in the presence of nonionic emulsifiers. Thus, a composition (average particle 0.19 µm, average viscosity 141 cP) contains emulsion-polymerized Na p-styrenesulfonate-diethylaminoethyl methacrylate—methacrylamide-itaconic acid-Bu methacrylate—Me methacrylate-Et methacrylate-Et acrylate copolymer neutralized by NH3.
 - 197450-79-6P 197450-80-9P

(paper impregnation emulsions for improved wet and dry strength and folding endurance)

- RN 197450-79-6 HCAPLUS
- CN Butanedioic acid, methylene-, polymer with butyl 2-methyl-2-propenoate, 2-(diethylamino)ethyl 2-methyl-2-propenoate, ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-methyl-2-propenamide and sodium 4-ethenylbenzenesulfonate, ammonium salt (9CI) (CA INDEX NAME)
 - CM 1
 - CRN 198487-66-0
 - CMF (C10 H19 N O2 . C8 H14 O2 . C8 H8 O3 S . C6 H10 O2 . C5 H8 O2 . C5 H8 O2 . C5 H8 O2 . C5 H6 O4 . C4 H7 N O . Na)x
 - CCT PMS

CM 2

Na

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 105-16-8 CMF C10 H19 N O2

CM 5

CRN 97-88-1 CMF C8 H14 O2

$$_{\text{n-Buo}} = \underbrace{\overset{\circ}{\mathbb{L}}}_{-\text{Me}}^{\text{CH}_2}$$

CM 6

CRN 97-65-4 CMF C5 H6 O4

$$_{\text{HO}_2\text{C}} = \bigcup_{-\text{CH}_2-\text{CO}_2\text{H}}^{\text{CH}_2}$$

CM 7

CRN 97-63-2

CMF C6 H10 O2

CM

CRN 80-62-6

CMF C5 H8 O2

CM 9

CRN 79-39-0

CMF C4 H7 N O

CN

RN 197450-80-9 HCAPLUS

Butanedioic acid, methylene-, polymer with butyl

2-methyl-2-propenoate, 2-(diethylamino)ethyl 2-methyl-2-propenoate, ethyl 2-methyl-2-propenoate, ethyl 2-propenoate, 2-hydroxyethyl

2-methyl-2-propenoate, methyl 2-methyl-2-propenoate,

2-methyl-2-propenamide and sodium 4-ethenylbenzenesulfonate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 198487-67-1

CMF (C10 H19 N O2 . C8 H14 O2 . C8 H8 O3 S . C6 H10 O3 . C6 H10 O2 .

C5 H8 O2 . C5 H8 O2 . C5 H6 O4 . C4 H7 N O . Na)x

CCI PMS

CM 2

CRN 2695-37-6

CMF C8 H8 O3 S . Na

∠сн=сн₂

Na

CM 3

CRN 868-77-9 CMF C6 H10 O3

CM 4

CRN 140-88-5

CMF C5 H8 O2

CM 5

CRN 105-16-8 CMF C10 H19 N O2

H2C 0 Me_ C_C_O_CH2_CH2_NEt2

CM 6

10/534,196

```
Me_U_U_U_NH2
```

IC ICM CO9D133-08 ICS CO8F002-30; D21H019-20; CO9D133-08; CO9D133-14; CO9D133-26; CO9D135-00; CO9D125-18

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 43

IT Emulsifying agents

Paper

SOURCE:

(paper impregnation emulsions for improved wet and dry strength and folding endurance)

197450-79-6P 197450-80-9P

(paper impregnation emulsions for improved wet and dry strength and folding endurance)

L50 ANSWER 35 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1996:156957 HCAPLUS Full-text

DOCUMENT NUMBER: 124:317989

ORIGINAL REFERENCE NO.: 124:58993a,58996a

TITLE: Synthesis and properties of fluoroalkylated 2-acryloxyethyltrimethylammonium chloride

oligomers

AUTHOR(S): Sawada, Hideo; Katayama, Shinsuke; Oue, Masatoshi; Kawase, Tokuzo; Hayakawa, Yoshio; Baba, Masanori;

Tomita, Toshio; Mitani, Motohiro

CORPORATE SOURCE: Dep. Chem., Nara Natl. Coll. Technol., Nara,

639-11, Japan Nihon Yukagakkaishi (1996), 45(2), 161-9

CODEN: NIYUFC; ISSN: 1341-8327

PUBLISHER: Nihon Yukagaku Gakkai

DOCUMENT TYPE: Journal LANGUAGE: Japanese

ED Entered STN: 19 Mar 1996
AB New fluoroalkylated oligomers with carbon-carbon bonds and containing

trimethylammonium units were prepared under very mild conditions by reactions of fluoroalkanovl peroxides as key materials with 2acryloxyethyltrimethylammonium chloride. The oligomers were soluble in water, methanol, ethanol and DMSO. Fluoroalkanoyl peroxides were also used to prepare fluoroalkylated co-oligomers containing trimethylammonium units by cooligomerization with co-monomers such as trimethylvinylsilane, Me methacrylate, Et methacrylate and Bu methacrylate. The co-oligomers were soluble, as well, in not only polar solvents such as water, methanol and ethanol but non-polar aromatic solvents, such as benzene and toluene. Fluoroalkylated oligomers containing trimethylammonium units could reduce the surface tension of water to 10 mN/m, and were applicable to new cationic oligo-surfactants as well as the usual low mol. fluorinated surfactants, even though they were high mol. fluoroalkylated compds. The fluorinated oligomers were inactive toward HIV-1 (human immunodeficiency virus type 1) replication in MT-4 cells. However, they possessed antibacterial activity toward Staphylococcus aureus.

IT 176242-57-2DP, [2-(Acryloyloxy)ethyl]trimethylammonium chloride-butyl methacrylate copolymer, reaction products with fluoroalkanoyl peroxide

(oligomeric; synthesis and properties of fluoroalkylated acryloxyethyltrimethylammonium chloride oligomers)

RN 176242-57-2 HCAPLUS

10/534.196

```
Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride,
    polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 44992-01-0
    CMF C8 H16 N O2 . C1
            C1 =
     CM
     CRN 97-88-1
     CMF C8 H14 O2
 n-Buo-U-U-Me
    35-4 (Chemistry of Synthetic High Polymers)
     Section cross-reference(s): 46, 63
    Surfactants
        (cationic, synthesis and properties of fluoroalkylated
       acryloxyethyltrimethylammonium chloride oligomer surfactants)
     67183-96-4DP, reaction products with fluoroalkanov1 peroxide
     121035-47-0DP, reaction products with fluoroalkanoyl peroxide
     176242-57-2DP, [2-(Acryloyloxy)ethyl]trimethylammonium
     chloride-butyl methacrylate copolymer, reaction products with
     fluoroalkanovl peroxide 176242-58-3DP.
     [2-(Acryloyloxy)ethyl]trimethylammonium chloride-trimethylvinylsilane
     copolymer, reaction products with fluoroalkanoyl peroxide
     176242-59-4P, [2-(Acryloyloxy)ethyl]trimethylammonium chloride-ethyl
     methacrylate copolymer
        (oligomeric; synthesis and properties of fluoroalkylated
       acryloxyethyltrimethylammonium chloride oligomers)
L50 ANSWER 36 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                        1995:673885 HCAPLUS Full-text
DOCUMENT NUMBER:
                        123:97818
ORIGINAL REFERENCE NO.: 123:17191a,17194a
TITLE:
                        Cleansing solution for
                        electrophotographic apparatus
INVENTOR(S):
                        Suzuki, Nobuo
PATENT ASSIGNEE(S):
                       Fuji Photo Film Co Ltd, Japan
SOURCE:
                        Jpn. Kokai Tokkyo Koho, 36 pp.
                        CODEN: JKXXAF
```

Patent

DOCUMENT TYPE:

LANGUAGE:

Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

19930408 <---PRIORITY APPLN. INFO.: JP 1993-82064 19930408 <--

ED Entered STN: 14 Jul 1995

AB The title cleansing solution contains a nonag, solvent of elec. resistance \geq 109 Ω .cm and dielec. constant \leq 3.5 and a graft copolymer soluble in the above solvent. The types of the graft copolymer are also claimed.

TT 138114-66-6P

(prepared for electrophotog. apparatus cleansing solution) 138114-66-6 HCAPLUS

RN

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(diethylamino)ethyl 2-methyl-2-propenoate and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7 CMF C22 H42 O2

CM 2

CRN 105-16-8 CMF C10 H19 N O2

CM 3

CRN 97-88-1 CMF C8 H14 O2

```
IC ICM G03G021-00
ICS G03G015-10
```

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST cleansing soln electrophotog app nonaq solvent; graft copolymer cleansing soln

IT Electrophotography

(apparatus, cleansing solution containing nonaq. solvent and graft copolymer for)

25639-21-8DP, Octadecvl methacrylate graft homopolymer, carboxy-terminated 25719-52-2DP, polar group-terminated 124973-68-8DP, Octadecyl methacrylate-styrene graft copolymer, carboxy-terminated 124973-68-8P, Octadecyl methacrylate-styrene graft copolymer 138114-17-7P, Dodecyl methacrylate-methacrylic acid graft copolymer 138114-18-8P 138114-19-9P 138114-20-2P 138114-21-3P 138114-22-4P 138114-23-5P 138114-49-5DP. carboxy-terminated 138114-50-8DP, Methyl methacrylate-octadecyl methacrylate graft copolymer, carboxy-terminated 138114-50-8DP, Methyl methacrylate-octadecyl methacrylate graft copolymer, polar group-terminated 138114-50-8P, Methyl methacrylate-octadecyl methacrylate graft copolymer 138114-51-9DP, carboxy-terminated 138114-51-9P 138114-52-0DP, carboxy-terminated 138114-52-0P, Acrylonitrile-octadecyl methacrylate graft copolymer 138114-53-1DP, carboxy-terminated 138114-53-1P 138114-54-2DP, carboxy-terminated 138114-54-2P 138114-56-4DP, carboxy-terminated 138114-56-4P 138114-57-5DP, carboxy-terminated 138114-57-5P 138114-58-6DP, carboxy-terminated 138114-58-6DP 138114-59-7DP, Buty1 methacrylate-octadecyl methacrylate graft copolymer, polar group-terminated 138114-60-0DP, Butyl methacrylate-dodecyl methacrylate graft copolymer, polar group-terminated 138114-61-1DP, polar group-terminated 138114-63-3P 138114-64-4P 138114-65-5P 138114-66-6P 138114-67-7P, 2-Hydroxyethyl methacrylate-methyl methacrylate-octadecyl methacrylate graft copolymer 138114-68-8P 138232-63-0DP, carboxy-terminated 138232-63-0P, Dodecyl methacrylate-methyl methacrylate graft copolymer 138537-63-0P 142245-67-8DP, carboxy-terminated 142245-67-8P 142245-68-9P, Lauryl methacrylate-styrene graft copolymer 142245-69-0P, 2-Ethylhexyl methacrylate-styrene graft copolymer 142293-43-4P, 2-Ethylhexyl methacrylate-methyl methacrylate graft copolymer (prepared for electrophotog, apparatus cleansing solution)

(prepared for electrophotog, apparatus cleamanng solution)

17 25639-21-8DP, Octadecyl methacrylates homopolymer, carboxy-terminated, ester with hydroxy-terminated methacrylates 112955-45-0P

112955-56-3P 114512-15-1P 13764-74-3DP, reaction product with acrylic chloride 139104-78-2P 139104-81-7P 139104-83-9P 139104-96-2P 139104-97-3P 139104-88-4P 139104-98-6P 139104-99-7P 139105-01-4P 139104-96-6P 139104-98-6P 139105-07-0P 139105-01-4P 139105-07-0P 139105-01-4P 139105-01-5P 139105-07-0P 139105-08-1P 139105-3P 141349-31-7P 141348-36-3P 141349-00-0P 141349-03-3P 141349-31-7P 165035-77-8P 165035-78-9P 165035-79-0P 165035-80-3P 165035-81-4P

(prepared for forming graft copolymer for electrophotog. apparatus cleansing solution)

L50 ANSWER 37 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1995:231058 HCAPLUS Full-text DOCUMENT NUMBER: 122:10969
ORIGINAL REFERENCE NO.: 122:2407a,2410a

RIGINAL REFERENCE NO.: 122:240/a,2410

10/534,196

TITLE: Large-dimension emulsion polymer particles and

their manufacture and use

INVENTOR(S): Chiou, Shang Jaw; Li Sheng, Miao Hsun; Hook, John

William, III; Stevens, Travis Edward

PATENT ASSIGNEE(S): Rohm and Haas Co., USA SOURCE: Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
EP 597567		A2		EP 1993-305385	19930708
EP 597567 EP 597567		A3 B1	19950315 19990818		
R: AT,		DE, D	K, ES, FR,	GB, GR, IE, IT, LI, LU,	MC, NL,
US 5369163		A	19941129	US 1992-975746	19921113
CA 2093483		A1	19940514		19930406
JP 06199914		A	19940719		19930507
JP 3248599		B2	20020121		
BR 9302021		A	19940517	BR 1993-2021	19930520
AT 183518		T	19990915	AT 1993-305385	19930708
ES 2137971		Т3	20000101	ES 1993-305385	19930708
SG 73370		A1	20000620	SG 1996-2383	19930708
NO 9302523		A	19940516		19930712
IL 106312		A	19970930		19930712
HU 66123		A2	19940928		19930713
FI 9303196		A	19940514		19930714
AU 9342056		A	19940526	< AU 1993-42056 <	19930719
AU 670944		B2	19960808		
ZA 9305265		A	19940513		19930721
RU 2133756		C1	19990727		19931110
CN 1089621		A	19940720	CN 1993-121231	19931113
CN 1066157		С	20010523	<	
CN 1270176		A	20010323		20000114
RITY APPLN. I	NFO.:			VS 1992-975746	A 19921113

ED Entered STN: 08 Dec 1994

AB Large-dimension particles with shapes varying from egg-like to nearly spherical are manufactured by emulsion-polymerization of ≥1 ethylenically

unsatd. monomer in the presence of a 0.5-50% a solubilized, amphiphilic, hydrophobic-hydrophilic-balanced, alkali— or acid-soluble resin as dispersant and optionally, an organic additive under such conditions that the amphiphilic stabilizer remains in solution and addition of more monomer in a controlled way. The particles are useful as reinforcing additives for coatings, moldings, potting compns. adhesives, and cementitious compns. Thus, an emulsion containing Bu acrylate (I), water, triethanolammonium dodecylbenzenesulfonate, Me methacrylate (II), and n-dodecanethiol was fed 1.5 h simultaneously with an aqueous solution containing tert-Bu hydroperoxide and (NH4)2S208, and an aqueous NaHSO3 solution to an emulsion containing 1:1:1 (weight ratio) I-methacrylic acid-II copolymer, triethanolamine solubilizer, FeSO4, and versene at 68° to give rod-shaped particles with diameter 0.8 μm and length 50-70 μm .

IT 35166-02-0P, Butyl acrylate-dimethylaminoethyl methacrylate-methyl methacrylate copolymer (large-dimension emulsion polymer particles)

RN 35166-02-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2

CMF C8 H15 N O2

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

```
IC ICM C08F002-24
ICS C09D157-00
```

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 37, 42

IT Dispersing agents

(amphiphilic acrylic polymers; large-dimension emulsion polymer particle manufacture)

9003-49-0P, Poly(butyl acrylate) 9003-53-6P, Polystyrene 9010-88-2P, Ethyl acrylate-methyl methacrylate copolymer 25067-01-0DP, Butvl acrylate-vinvl acetate copolymer, hydrolyzed 25067-01-0P, Butyl acrylate-vinyl acetate copolymer 25067-63-4DP, Methyl acrylate-vinyl acetate copolymer, hydrolyzed 25153-49-5P, Ethyl acrylate-glycidyl methacrylate-methyl methacrylate copolymer 25190-97-0DP, Ethyl acrylate-vinyl acetate copolymer, hydrolyzed 25567-76-4P, Acrylonitrile-butyl acrylate copolymer 25767-47-9P, Butvl acrylate-styrene copolymer 25852-37-3P, Butvl acrylate-methyl methacrylate copolymer 25951-39-7P, Butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 26353-42-4P, Butyl acrylate-ethyl acrylate copolymer 29354-76-5P 31326-18-8P, Butyl acrylate-ethyl acrylate-itaconic acid copolymer 35166-02-0P, Butyl acrylate-dimethylaminoethyl methacrylate-methyl methacrylate copolymer 36182-73-7P 39317-52-7P, Divinylbenzene-vinyltoluene copolymer 55567-73-2P 56848-73-8P, Acrylamide-butyl acrylate-2-hydroxyethyl methacrylate-methyl methacrylate copolymer 67785-43-7P 87889-52-9P 159487-69-1P

(large-dimension emulsion polymer particles)

L50 ANSWER 38 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1994:580491 HCAPLUS Full-text

DOCUMENT NUMBER: 121:180491

ORIGINAL REFERENCE NO.: 121:32795a,32798a

TITLE: Preparation of aqueous polymer dispersions
INVENTOR(S): Namura, Ichiro; Minami, Kenji; Izumibayashi,

Masuji

PATENT ASSIGNEE(S): Nippon Catalytic Chem Ind, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

PATENT INFORMATION:

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06145210	A	19940524	JP 1992-293469	19921030
			<	
RIORITY APPLN. INFO.:			JP 1992-293469	19921030
			/	

ED Entered STN: 15 Oct 1994 GI

 $R1 \longrightarrow N$

PR

- AB In preparation of the dispersions by emulsion or suspension polymerization of unsatd. monomers in aqueous media by using dispersion stabilizers, oxazoline copolymers obtained from oleophilic oxazoline derivs. (I; R1 = cyclohexyl, 2-cyclohexenyl, 3-cyclohexenyl, and hydrophilic oxazoline compds. are used as the dispersion stabilizers. Thus, polymerizing 386.4 parts styrene and 213.6 parts 2-ethylhexyl acrylate at 80° in an aqueous solution containing 36 parts block copolymer [prepared from 10 mol 2-methyl-2-oxazoline and 0.75 mol 2-(3'-cyclohexenyl)-2-oxazoline] in the presence of K25208 gave a polymer dispersion. An aqueous composition containing the dispersion formed a coating with good adhesion to steel, glass, and PET plates and water resistance.
 - (preparation of, oxazoline polymer dispersion stabilizers in, for toners)
- RN 157797-87-0 HCAPLUS
- NAM 17/73/-0 NoneBook Charles of the Company of
 - CM 1
 - CRN 27457-28-9 CMF C8 H8 O3 S . Na
 - CCI IDS



D1-CH-CH2

D1-SORH

Na

CM 2

CRN 1321-74-0 CMF C10 H10

CCI IDS

2 D1-CH-CH2

```
CM 3
    CRN 105-16-8
    CMF C10 H19 N O2
H2C 0
Me_C_C_C_C_CH2_CH2_NEt2
    CM 4
    CRN 100-42-5
    CMF C8 H8
наст сн-ръ
    CM 5
    CRN 97-88-1
    CMF C8 H14 O2
       O CH2
n-Buo-U-U-Me
    ICM C08F002-22
IC
    ICS C08F002-18
CC
    35-4 (Chemistry of Synthetic High Polymers)
    Section cross-reference(s): 42, 46
    Surfactants
       (oxazoline polymers, in manufacture of polymer aqueous dispersions, for
       water-resistant coatings)
ΙT
    25767-47-9P, Butyl acrylate-styrene copolymer 157797-87-0P
       (preparation of, oxazoline polymer dispersion stabilizers in, for
       toners)
L50 ANSWER 39 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                       1994:436303 HCAPLUS Full-text
DOCUMENT NUMBER:
                        121:36303
ORIGINAL REFERENCE NO.: 121:6730h,6731a
TITLE:
                        Synthesis and surface activity of novel ABA type
                        triblock cationic amphiphiles
AUTHOR(S):
                        Oh, Jae Min; Lee, Hyung Jong; Shim, Hong Ku; Kwon,
                        Sam
CORPORATE SOURCE:
                        Dep. Chem., Korea Adv. Inst. Sci. Technol.,
```

Taejon, 305-701, S. Korea

SOURCE: Polymer Bulletin (Berlin, Germany) (1994

), 32(2), 149-54

CODEN: POBUDR; ISSN: 0170-0839

DOCUMENT TYPE: Journal LANGUAGE: English

ED Entered STN: 23 Jul 1994

AB Different amphiphilic triblock copolymers of Bu methacrylate (BMA) and 2-

methacryloyloxyethyltrimethyl ammonium iodide were prepared by the reaction of precursor polymer and iodomethane. The precursor polymers were obtained by group-transfer polymerization (GTP) of BMA with 2-(dimethylaminolethyl methacrylate (DMAEMA) using a difunctional initiator at room temperature Their mol. weight and composition could be controlled by regulating the monomer to initiator ratio and the feed ratio of two monomers. From quant. quaternization of poly(DMAEMA) segments of precursor polymers by iodomethane, the target polymers were prepared These amphiphilic triblock copolymers exhibited excellent surface activity and lowered the surface tension of their aqueous solns. The lowest surface tension (?) value reached to 27.4 dyn/cm. 115468-45-69. Butyl methacrylate-2-(dimethylaminolethyl

IT 115468-45-6P, Butyl methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer 156120-02-4P, Butyl

methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer methyl iodide salt 830334-77-5P 836606-96-3P

(triblock, preparation and characterization and quaternization of) ${\rm RN} - 115468{-}45{-}6 - {\rm HCAPLUS}$

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, block (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 97-88-1 CMF C8 H14 O2

RN 156120-02-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, block, compd. with iodomethane (9CI) (CA INDEX NAME)

CM 1

CRN 74-88-4

CMF C H3 I

H3C-I

CM 2

CRN 115468-45-6

CMF (C8 H15 N O2 . C8 H14 O2) x CCI PMS

....

CM 3

CRN 2867-47-2

CMF C8 H15 N O2

CM 4

CRN 97-88-1

CMF C8 H14 O2



RN 830334-77-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, triblock (CA INDEX NAME)

CM 1

CRN 2867-47-2

CMF C8 H15 N O2

CM 2

RN 836606-96-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, triblock, compd. with iodomethane (9CI) (CA INDEX NAME)

CM 1

CRN 74-88-4 CMF C H3 I

H3C-I

CM 2

CRN 830334-77-5 CMF (C8 H15 N O2 . C8 H14 O2)x CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

CM 4

CRN 97-88-1 CMF C8 H14 O2

CC 35-4 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 36, 45

IT Surfactants

(amphiphilic, Bu methacrylate-2-(dimethylamino)ethyl methacrylate triblock copolymer and its quaternized derivative)

IT 115468-45-6P, Butyl methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer 156120-02-4P, Butyl methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer methyl iodide salt 830334-77-5P 836606-96-3P

(triblock, preparation and characterization and quaternization of)

L50 ANSWER 40 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1993:203378 HCAPLUS Full-text

DOCUMENT NUMBER: 118:203378

ORIGINAL REFERENCE NO.: 118:34724h,34725a

TITLE: Electrically conductive coatings and coated

fabrics
INVENTOR(S): Mitsutal

INVENTOR(S): Mitsutake, Tatsuo; Narisawa, Shizuo
PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

D. M. ...

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04309510	A	19921102	JP 1991-72839	19910405
			<	
JP 3341084	B2	20021105		
PRIORITY APPLN. INFO.:			JP 1991-72839	19910405
			<	

ED Entered STN: 14 May 1993

$$H_2C = \begin{array}{c} R^1 \\ COXC_nH_{2n} = \begin{array}{c} R^2 \\ N + R^4 \end{array} \quad Y = \begin{array}{c} \\ 1 \\ 1 \end{array}$$

10/534,196

(coatings, preparation of, elec. conductive, transparent, for fabrics)

- RN 147232-97-1 HCAPLUS
- CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-propenamide (CA INDEX NAME)
 - CM 1
 - CRN 5039-78-1
 - CMF C9 H18 N O2 . C1
 - 0 CH2 Me3+N-CH2-CH2-O-C-C-Me
 - c1-
 - CM 2
 - CRN 924-42-5
 - CMF C4 H7 N O2
 - HO_ CH2_ NH_ CH_ CH_
 - CM 3
 - CRN 141-32-2
 - CMF C7 H12 O2
 - n-Buo-U-CH-CH2
 - CM 4
 - CRN 100-42-5 CMF C8 H8
 - GIAL GO III

10/534,196

RN 147232-98-2 HCAPLUS CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME) CM 1 CRN 5039-78-1 CMF C9 H18 N O2 . C1 O CH₂ Me3+N-CH2-CH2-O-C-C-Me € c1 -CM 2 CRN 924-42-5 CMF C4 H7 N O2 CM 3 CRN 141-32-2 CMF C7 H12 O2 CM 4 CRN 80-62-6 CMF C5 H8 O2

Me_Ü_Ü_OMe

```
147232-99-3 HCAPLUS
CN
    Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-,
    chloride (1:1), polymer with butyl 2-propenoate and ethenylbenzene
    (CA INDEX NAME)
    CM
        1
    CRN 5039-78-1
    CMF C9 H18 N O2 . C1
                  O CH2
Me3+N-CH2-CH2-O-C-U-Me
          C1 =
    CM
        2
    CRN 141-32-2
    CMF C7 H12 O2
    CM 3
    CRN 100-42-5
    CMF C8 H8
H2C= CH-Ph
IC
    ICM C08F220-34
    ICS C08F220-60; C08F246-00; C08L033-14; C08L033-26; D01F001-09;
         D01F006-36
ICA C07C219-08; C07C233-38
    76-2 (Electric Phenomena)
    Section cross-reference(s): 35, 40, 42
    fabric coating elec conductive transparent;
    acryloyloxyalkyltrialkylammonium salt copolymer conductive coating
    Textiles
        (coatings for, elec. conductive, transparent)
    Polvester fibers, miscellaneous
        (fabrics, coatings for, elec. conductive, transparent)
```

IT Coating materials

> (elec. conductive, transparent, containing copolymers of quaternary ammonium-containing acrylate esters, for fabrics)

147212-15-5P 147232-97-1P 147232-98-2P

147232-99-3P

(coatings, preparation of, elec. conductive, transparent, for fabrics)

L50 ANSWER 41 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1993:39498 HCAPLUS Full-text

DOCUMENT NUMBER: 118:39498

ORIGINAL REFERENCE NO.: 118:7217a,7220a

TITLE: Emulsion copolymerization of small-particle size,

high-molecular-weight poly(alkylaminoalkyl methacrylate-co-alkyl methacrylate) latexes

AUTHOR(S): Vanderhoff, J. W.; Hong, S. H.; Hu, M. R.; Park, J. M.; Segall, I.; Wang, S.; Yue, H. J.

CORPORATE SOURCE: Emulsion Polym. Inst., Lehigh Univ., Bethlehem, PA, 18015, USA

SOURCE: ACS Symposium Series (1992), 492 (Polym.

Latexes), 216-33 CODEN: ACSMC8; ISSN: 0097-6156

DOCUMENT TYPE: Journal LANGUAGE: English ED Entered STN: 03 Feb 1993

AB

The compositionally homogeneous viscoelastic title copolymers were prepared by semicontinuous emulsion polymerization The results were evaluated in terms of the expected proportionalities of the rate of polymerization to the number of polymer particles and the mol. weight to the number of particles relative to the rate of radical generation. The rates of polymerization were determined gravimetrically or by gas chromatog. The average particle sizes were inordinately small (18-86 nm), and the mol. wts. were typically ≥106. The small particle sizes were first attributed to the high emulsifier concentration and excellent stability of the latexes, and later to the failure of the latex particles containing only 8-11 polymer mols, to grow further. The high mol. wts. were attributed to the large number of particles. The copolymer composition, mol. weight, solubility, and viscoelastic properties in solution were determined, and the effects of the type of catalyst (water- or oil-soluble), polymerization temperature, emulsifier type and concentration, and monomer feed were studied. Anal. of the homogeneity of the copolymers by 13C-NMR and FTIR spectroscopy, DSC, and TEM gave conflicting results.

129698-94-8P, Diethylaminoethyl methacrylate-isobutyl ΙT methacrylate copolymer

(preparation of, by emulsion polymerization, particle size and mol. weight

relation to)

in

RN 129698-94-8 HCAPLUS

2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with CN 2-methylpropyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 105-16-8 CMF C10 H19 N O2

Me_U_U_O_CH2_CH2_NEt2

CM 2

CRN 97-86-9 CMF C8 H14 O2



CC 35-4 (Chemistry of Synthetic High Polymers)

IT Emulsifying agents

(for semicontinuous emulsion polymerization of alkylaminoalkyl methacrylates with alkyl methacrylates)

IT 25119-82-8P, Diethylaminoethyl methacrylate polymer 26716-20-1P
27027-16-3P, Diethylaminoethyl methacrylate-methyl methacrylate
copolymer 40008-96-6P, tert-Butylaminoethyl methacrylate-isobutyl
methacrylate copolymer 53489-10-4P 90667-56-4P
129698-94-8P, Diethylaminoethyl methacrylate-isobutyl
methacrylate copolymer

(preparation of, by emulsion polymerization, particle size and mol. weight

relation to)

in

L50 ANSWER 42 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1992:48849 HCAPLUS Full-text

DOCUMENT NUMBER: 116:48849

ORIGINAL REFERENCE NO.: 116:8283a,8286a

TITLE: Charge-controlled positively charging toner

containing vinyl resin particle on its surface R(S): Maruta, Masayuki; Kida, Katsuaki

INVENTOR(S): Maruta, Masayuki; Kida, Katsuak PATENT ASSIGNEE(S): Nippon Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03132766	A	19910606	JP 1989-272059	19891019
			<	
PRIORITY APPLN. INFO.:			JP 1989-272059	19891019
			<	

ED Entered STN: 08 Feb 1992

The title toner is prepared by addition, to the surface of a colored particle comprising a binder resin, a coloring agent, and a charge-controlling agent, of a resin particle (average particle size 0.02-0.1 μm) which is prepared by emulsion polymerization of ≥ 1 α,β -unsatd. vinyl monomers in an aqueous medium in the presence of a higher fatty acid alkali metal salt surfactant and a polymerization initiator having CO2H (salt) and the charge of the colored particle is higher than that of the toner after the addition. The toner shows good flow, chargeability, and durability. Thus, Me methacrylate and styrene

were polymerized in an aqueous medium containing Na stearate and 4,4'-azobis(4-cyanovaleric acid) and spray-dried to give a resin particle. The particle was mixed with a colored particle prepared from Bu methacrylate-dimethylaminoethyl methacrylate-styrene copolymer, Bu methacrylate-styrene copolymer, polypropylene wax, and C black to give a toner, which was mixed with a ferrite carrier to give a developer.

IT 81094-87-3P

(preparation of, charge-controlled binder, for electrophotog. developer toner, surface additive for, emulsion-polymerized vinyl resin as)

RN 81094-87-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and ethenylbenzene (CA TNDEX NAME)

CM 1

CRN 2867-47-2

CMF C8 H15 N O2

CM 2

CRN 100-42-5

CMF C8 H8

H2C-CH-Ph

CM 3

CRN 97-88-1

CMF C8 H14 O2

IC ICM G03G009-08

74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

IT Surfactants

(alkali metal higher fatty acid salt, for emulsion polymerization, for vinyl resin surface additive, for electrophotog. developer toner)
IT 81094-87-3P

(preparation of, charge-controlled binder, for electrophotog. developer toner, surface additive for, emulsion-polymerized vinyl resin as)

L50 ANSWER 43 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1991:45157 HCAPLUS Full-text

DOCUMENT NUMBER: 114:45157

ORIGINAL REFERENCE NO.: 114:7841a,7844a

TITLE: Emulsion polymerization of vinyl monomers
INVENTOR(S): Kawakami, Susumu; Sakai, Yutaka; Kariya, Toshe;

Soda, Yoshihiro; Hata, Hironori PATENT ASSIGNEE(S): Natoco Paint Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02178301	A	19900711	JP 1988-334354	19881228
			<	
JP 2734046	B2	19980330		
PRIORITY APPLN. INFO.:			JP 1988-334354	19881228
			<	

ED Entered STN: 09 Feb 1991

AB Monomers containing silyl-reactive vinyl monomers are emulsion-polymerized in an aqueous solution of water-soluble hydrolyzable silyl-containing synthetic resins. The polymers are crosslinked by the reactive emulsifiers to form alkali-, solvent-, and water-resistant films with good adhesion when applied to substrates. Thus, Et acrylate, Me methacrylate, styrene, and vinyltrimethoxysilane were emulsion-polymerized at 80° in the presence of NH3-neutralized Bu acrylate-methacrylic acid-y-

methacryloyloxypropyltrimethoxysilane—Me methacrylate-styrene copolymer (emulsifier) and K25208 to give a polymer emulsion with solids 50% and viscosity 250 cP. The polymer showed Tg 46° and min. film-forming temperature (MFT) 7°, formed an acetone-, alkali-, and water-resistant film on glass, and showed good adhesion when applied to a phosphate-treated steel sheet while a Bu acrylate—Me methacrylate—7- methacryloyloxypropyltrimethoxysilane-styrene copolymer prepared in the presence of Eleminol JS-2 (polymerizable surfactant) showed Tg 38° and MFT 37° and formed a film which whitened by H20 or M2CCO.

- II 131406-17-2DP, polymers with silyl reactive group-containing polymers
- (preparation of, coatings, alkali- and solvent- and water-resistant)
 RN 131406-17-2 HCAPLUS
- CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, ethenylsilylidyne triacetate, methyl 2-methyl-2-propenoate and 2-methylpropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 4130-08-9

CMF C8 H12 O6 Si

CRN 2867-47-2 CMF C8 H15 N O2

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 106-63-8 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

```
IC ICM C08F002-22
    42-10 (Coatings, Inks, and Related Products)
    Section cross-reference(s): 35
ΤТ
    Emulsifying agents
       (reactive, water-soluble silyl-reactive polymers, for emulsion
polymerization
       of vinvl monomers)
    67783-85-1DP, polymers with silvl-containing polymer emulsifiers
    127475-66-5DP, polymers with silvl reactive group-containing polymers
    131406-17-2DP, polymers with silyl reactive group-containing
    polymers 131431-00-0DP, polymers with silyl-containing polymer
    emulsifiers
       (preparation of, coatings, alkali- and solvent- and water-resistant)
L50 ANSWER 44 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1990:140052 HCAPLUS Full-text
DOCUMENT NUMBER:
                     112:140052
ORIGINAL REFERENCE NO.: 112:23689a,23692a
TITLE:
                      Preparation of ionic acrylic block polymers as
                      dispersants for pigments
INVENTOR(S):
                     West, Michael Wendell Johnson
PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA
SOURCE:
                     Braz. Pedido PI, 21 pp.
                      CODEN: BPXXDX
DOCUMENT TYPE:
                      Patent
LANGUAGE:
                      Portuguese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO.
                   KIND DATE APPLICATION NO.
                                                          DATE
                     ----
    _____
                                       -----
                                                            _____
    BR 8800898
                      A
                            19890926 BR 1988-898
                                                            19880302
                                             <--
    AU 8812016
                      A
                            19890824 AU 1988-12016
                                                            19880222
                                              <--
    AU 604844
                      B2 19910103
                                                       19880302
PRIORITY APPLN. INFO.:
                                       BR 1988-898
                                              <--
```

ED Entered STN: 13 Apr 1990

AB Title copolymers comprise (alkoxy)alkyl (meth)acrylate blocks [number-average mol. weight (Mn) 200-10,000] bearing the pendant ionic groups ARImX [A = N, P, S; Rl = (alkoxy)alkyl, (substituted) Ph; X = halogen, organic acid base salt group; m = 3 if A = N or P, 2 if A = S] and (alkoxy)alkyl (meth)acrylate blocks (Mn 500-100,000) without pendant groups. Me methacrylate-2-(dimethylamino)ethyl methacrylate block copolymer benzyl chloride salt was an effective dispersant for pigments.

125

T 125975-91-9P 125975-92-0P 125975-95-3P

125975-97-5P (dispersants for pigments, manufacture of)

RN 125975-91-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with

2-(dimethylamino)ethyl 2-ethyl-2-propenoate and methyl 2-methyl-2-propenoate, block, comod, with (bromomethyl)benzene (9CI)

(CA INDEX NAME)

CM 1

CRN 100-39-0 CMF C7 H7 Br

```
Ph—CH2—Br
```

```
CM 2
   CRN 125975-90-8
   CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x
   CCI PMS
        CM
             3
        CRN 2867-47-2
        CMF C8 H15 N O2
Me2N-CH2-CH2-0-CH2
        CM 4
        CRN 97-88-1
        CMF C8 H14 O2
n-Buo-U-U-Me
        CM 5
        CRN 80-62-6
        CMF C5 H8 O2
H2C O
Me_U_U_OMe
```

RN 125975-92-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, block, compd. with methyl 4-methyl-benzenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 125975-90-8 CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\texttt{Me}_2 \texttt{N-CH}_2 - \texttt{CH}_2 - \texttt{O-} \overset{\circ}{\textbf{U}} - \overset{\mathsf{CH}_2}{\textbf{U}} - \texttt{Me}_2$$

CM 4

CRN 97-88-1 CMF C8 H14 O2

CAE CO HI4 C

$$_{\rm n-BuO} = \overset{\circ}{\overset{\rm CH}_2} \overset{\rm CH}{\overset{\rm CH}_2}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

```
10/534,196
RN 125975-95-3 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
     2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl
      2-methyl-2-propenoate, block, compd. with iodomethane (9CI) (CA INDEX
     NAME)
     CM 1
     CRN 74-88-4
     CMF C H3 I
 H3C-I
     CM 2
     CRN 125975-90-8
     CMF (C8 H15 N O2 . C8 H14 O2 . C5 H8 O2)x
     CCI PMS
           CM 3
           CRN 2867-47-2
           CMF C8 H15 N O2
 Me 2 N- CH 2- CH 2- O-
           CM 4
           CRN 97-88-1
           CMF C8 H14 O2
 _{\text{n-BuO}} = \overset{\circ}{\mathbb{L}} = \overset{\text{CH}_2}{\mathbb{L}}_{-\text{Me}}
```

CM 5 CRN 80-62-6 CMF C5 H8 O2 RN 125975-97-5 HCAPLUS CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, block, compd. with methyl 4-methylbenzenesulfonate (9CI) (CA INDEX NAME) CM 1 CRN 80-48-8 CMF C8 H10 O3 S CM 2 CRN 115468-45-6 CMF (C8 H15 N O2 . C8 H14 O2)x CCI PMS CM 3 CRN 2867-47-2 CMF C8 H15 N O2 Me 2 N- CH 2- CH 2-CM 4 CRN 97-88-1 CMF C8 H14 O2

IC ICM C08F293-00 CC 35-4 (Chemistry of Synthetic High Polymers) Section cross-reference(s): 42, 46 IT Dispersing agents

(acrylic block polymer quaternary ammonium derivs., for pigments) IT 125975-91-99 125975-92-0P 125975-94-2P 125975-95-3P 125975-96-4P 125975-97-5P

(dispersants for pigments, manufacture of)

L50 ANSWER 45 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1989:39568 HCAPLUS Full-text

DOCUMENT NUMBER: 110:39568

ORIGINAL REFERENCE NO.: 110:6613a,6616a

TITLE: Block copolymer dispersants containing ionic

moieties

INVENTOR(S): West, Michael W. J.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 4755563	Α	19880705	US 1986-947319		19861229
CA 1303267	С	19920609	CA 1988-559227		19880218
EP 329873	A1	19890830	EP 1988-301552		19880223
	B1	19920930			
R: AT, BE, CH, ZA 8801253	DE, ES	, FR, GB, 19891025	IT, LI, LU, NL, SE ZA 1988-1253		19880223
AT 81139	T	19921015	AT 1988-301552		19880223
ES 2035264	Т3	19930416	ES 1988-301552 <		19880223
JP 01229014	A	19890912	JP 1988-47677 <		19880302
PRIORITY APPLN. INFO.:			US 1986-947319 <		19861229
			EP 1988-301552	A	19880223

ED Entered STN: 04 Feb 1989

affinity to pigments comprise a copolymer of 0.1-50% cationic ammonium, phosphonium, or sulfonium group-containing ethylenically unsatd. monomer blocks (mol weight 200-10,000) and 50-99.9% blocks (mol weight 500-100,000) of CH2:CHCO2R and CH2:CCH3CO2R (R = C1-20 alkyl or C1-20 alkyl ether), prepared by group-transfer polymerization Thus, polymerizating 91.2 g Me methacrylate and 28.9 g N,M-dimethylaminoethyl methacrylate in 3 mL THF in 2 feed streams 20 min apart in the presence of 0.350 mL catalyst containing 1-methoxy-1-trimethylsiloxy-2-methylpropene and tetrabutylammonium 3-chlorobenzoate gave a block copolymer of which 30.69 g (in THF) was alkylated with 3.0 g benzyl chloride and refluxed in 50.5 g iso-PrOH for 3 h, then 5 h to give a block copolymer with tetriary amine content 0.31 mM/g. The above block copolymer had dispersion rating (1 = deflocculated, 4 = flocculated) 1 in MIBK for various standard obthalocvanies pigments.

IT 24938-16-7DP, Butyl methacrylate-dimethylaminoethyl methacrylate-methyl methacrylate copolymer, reaction product with alkylating agent

10/534,196

(preparation of, for pigment dispersing agent)

RN 24938-16-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM

CRN 2867-47-2 CMF C8 H15 N O2

CM :

CRN 97-88-1 CMF C8 H14 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

IC ICM C08F293-00

INCL 525287000

ΙT

CC 35-7 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 42

Dispersing agents

(ammonium or sulfonium or phosphonium group-containing block copolymers, manufacture of, for pigments)

74-88-4DP, Iodomethane, reaction product with dimethylaminoethyl methacrylate block copolymer 80-48-8DP, Methyl p-toluenesulfonate, reaction product with dimethylaminoethyl methacrylate block copolymer 100-39-0DP, Benzyl bromide, reaction product with dimethylaminoethyl methacrylate block copolymer 24938-16-7DP, Butyl methacrylate-dimethylaminoethyl methacrylate-methyl methacrylate-copolymer, reaction product with alkylating agent 111320-26-4DP, reaction products with benzyl chloride 115489-10-6DP, reaction

product with benzylbromide

(preparation of, for pigment dispersing agent)

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 46 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1988:511101 HCAPLUS Full-text

DOCUMENT NUMBER: 109:111101

ORIGINAL REFERENCE NO.: 109:18531a,18534a

TITLE: Vinyl polymers manufactured by suspension

polymerization

Kumagai, Yugo; Moribe, Isamu; Higashida, Osamu INVENTOR(S):

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63068601	A	19880328	JP 1986-211850	19860909
			<	
PRIORITY APPLN. INFO.:			JP 1986-211850	19860909

Entered STN: 01 Oct 1988 ED

AB Hydroxy and/or imide group-containing vinyl monomers are dispersed in water containing 0.01-0.2% (based on monomers) poly(vinvl alc.) (I) and polymerized with addition >0.2% (total amount, based on the monomers) I after reaching the polymerization temperature Adding of all of I at the beginning of polymerization gives polymers having high content of fines that clog filters. Thus, 75:192:30:3 (monomer feed ratio) 2-hydroxypropyl methacrylate-styrene-Bu acrylate-di-Bu maleate copolymer was prepared

113596-54-6P

(manufacture of, with multistage addition of poly(vinyl alc.) dispersing agents)

RN 113596-54-6 HCAPLUS

> 2-Propenoic acid, 2-methyl-, 2-(diethylamino)ethyl ester, polymer with butv1 2-propenoate, 2-(1,3-dihvdro-1,3-dioxo-2H-isoindol-2-v1)ethv1 2-methyl-2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM

1

CN

CRN 18791-05-4 CMF C14 H13 N O4

$$\bigcap_{\mathrm{CH}_2-\mathrm{CH}_2-\mathrm{O}} \bigcap_{\mathrm{CH}_2-\mathrm{Med}} \bigcap_{\mathrm$$

CM

```
CRN 141-32-2
    CMF C7 H12 O2
    CM 3
    CRN 105-16-8
    CMF C10 H19 N O2
 Me_U_C_C_O_CH2_CH2_NEt2
  H2C
    CM 4
    CRN 100-42-5
    CMF C8 H8
 H2C==CH-Ph
IC
    ICM C08F002-20
CC
    35-4 (Chemistry of Synthetic High Polymers)
ΙT
    Dispersing agents
        (polv(vinvl alc.), multistage addition of, in vinvl polymerization)
     106646-40-6P 113596-54-6P 116197-23-0P 116197-24-1P
       (manufacture of, with multistage addition of poly(vinyl alc.) dispersing
       agents)
L50 ANSWER 47 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN
                       1984:192548 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        100:192548
ORIGINAL REFERENCE NO.: 100:29291a,29294a
TITLE:
                       Sterically stabilized aqueous polymer dispersions
INVENTOR(S):
                        Davies, Stephen Parry; Thompson, Morice William
PATENT ASSIGNEE(S):
                       Imperial Chemical Industries PLC, UK
SOURCE:
                        Brit. UK Pat. Appl., 18 pp.
                        CODEN: BAXXDU
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                       English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE
                                       APPLICATION NO. DATE
```

GB	2120261	A	19831130	GB 1983-12212	19830504
0.5	2220202	**	15001100	<	13000001
CP	2120261	В	19851030	`	
	95263	A2		EP 1983-302507	19830504
LP	93263	AZ.	19031130		19030304
				<	
			19840229		
	95263		19870722		
	R: AT, BE, CH,				
AT	28467	T	19870815	AT 1983-302507	19830504
				<	
IN	159469	A1	19870523	IN 1983-DE300	19830510
				<	
AU	8314502	A	19831124	AU 1983-14502	19830512
				<	
ATT	563454	B2	19870709		
	4539362	A	19850903	US 1983-494886	19830516
00	1000002	**	15050505	<	15050510
DK	8302221	A	19831121	DK 1983-2221	19830518
D11	0302221	**	15051121	<	13030310
73	8303592	A	19840229	ZA 1983-3592	19830518
2A	0303392	А	13040223	ZA 1983-3392	19030310
	0201774		10001101		10020510
FI	8301774	A	19831121	FI 1983-1774	19830519
				<	
	72528	В	19870227		
	72528	C	19870608		
NO	8301777	A	19831121	NO 1983-1777	19830519
				<	
BR	8302643	A	19840117	BR 1983-2643	19830519
				<	
CA	1203338	A1	19860415	CA 1983-428543	19830519
				<	
JP	58213002	A	19831210	JP 1983-87821	19830520
				<	
JP	04025282	В	19920430		
	Y APPLN. INFO.:	-		GB 1982-14675 A	19820520
				<	
				EP 1983-302507 A	19830504
				11 1303 302307 A	10000004

OTHER SOURCE(S): MARPAT 100:192548

ED Entered STN: 08 Jun 1984

AB Stable aqueous ethylenically unsatd. polymer dispersions are prepared by emulsifying the monomers in water and polymerizing in the presence of a nomionizable free-radical organic azo catalyst and an amphipathic steric dispersion stabilizer which is a block or graft copolymer. Thus, 1.38 g polyethylene glycol monomethyl ether monomethacrylate [26915-72-0] (mol. weight 2000) was dissolved in 80 g water and separated into equal portions. 4,4'-Azobis(cyanovaleric acid) bis(diethanolamide) [88190-85-6] (0.138 g) was dissolved in 1 portion, and 6 g Me methacrylate was suspended in the other portion. The 2 portions were mixed together ultrasonically at 50° for 4.5 h to give a monodisperse PMM [9011-14-7] latex (particle size 330 nm) which did not visibly flocculate on addition of 10% aqueous CaCl2 solution

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IT 35166-02-0P

(dispersions, manufacture of, polymerization catalysts and stabilizers in)

RN 35166-02-0 HCAPLUS

CM 1

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

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CRN 2867-47-2
CMF C8 H15 N O2
```

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

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IC C08F004-04; C08F002-22
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CC 35-4 (Chemistry of Synthetic High Polymers)

IT Dispersing agents

(for acrylic polymers in water)

9003-20-7P 9003-53-6P 9011-14-7P 25852-37-3P 35166-02-0P 65572-63-6P 78228-25-8P 80044-51-5P 89678-92-2P

(dispersions, manufacture of, polymerization catalysts and stabilizers in)

L50 ANSWER 48 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1983:472278 HCAPLUS Full-text

DOCUMENT NUMBER: 99:72278
ORIGINAL REFERENCE NO.: 99:11221a,11224a

TITLE: Thermosetting cationic acrylic latex containing

blocked isocyanates

INVENTOR(S): Das, Suryya Kumar; Kania, Charles Martin

PATENT ASSIGNEE(S): PPG Industries, Inc. , USA

SOURCE: Fr. Demande, 23 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

10/534.196

	PATENT NO.	KIND	DATE	APPLICATION NO. DATE	I NO DATE	
	PAIENI NO.		DAIL			
	FR 2513647	A1	19830401	FR 1982-16144 1982092	.44 198209	24
				<		
	FR 2513647	B1	19860411			
	US 4395444	A	19830726	US 1981-305566 1981092	5566 198109	25
				<		
	CA 1192328	A1	19850820	CA 1982-410468 1982083	19820	31
				<		
	JP 58067764	A	19830422	JP 1982-165939 1982092	939 198209	22
				<		
	JP 62040386	В	19870827			
	DE 3235044	A1	19830428	DE 1982-3235044 1982092	5044 198209	22
				<		
	DE 3235044	C2	19850103			
	ITY APPLN. INFO.:			US 1981-305566 A 1981092	ECC 3 100100	25
FKIOR	III AFFLN. INFO.:				1366 A 19810	23
				<		

ED Entered STN: 12 May 1984

Entered JNN: 12 May 1904

A The title coatings, with good adhesion and efficient crosslinking, contain acrylic polymer latexes prepared by emulsion polymerization in acidic media in the presence of sulfonates of cationic surfactants. Thus, adding 90% of a mixture of Bu acrylate 282, Me methacrylate 294, and hydroxypropyl methacrylate 24 parts at 150 mL/h to Fecl3 0.3, H202 5.4, CI2H25NH2 4.0, MeSO3H 6.6, H20 827 parts and the remaining 10% monomers stirred at 72°, adding after 1 h 2-(dimethylamino)ethyl methacrylate 7.5, MeSO3H 6.6, and H20 106.8 parts in 3 equal portions at 1-h intervals, and stirring 1 h at 72-75° gave a copolymer [85931-84-6] latex with solids content 40.1%, pH 2.9, and viscosity 44.5 cP at 22°. A mixture of this latex 55.6, T102 pigment paste 42.7, blocked triisocyanate 55.6, Bu2Sn dilaurate 0.7, Bu(OCHZCH2)20H 5.9, and H20 15 parts was coated on Bonderized Al and baked 42 s at 216°, 50 s at 224°, or 55 s at 232° to give a film with MEK resistance 4, 48, and 84 double rubs, resp.

IT 85931-84-6P 86166-88-3P

(latex coatings, manufacture of, by emulsion polymerization) 85931-84-6 HCAPLUS

RN 85931-84-6 HCAI CN 2-Propenoic acid

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 1,2-propanediol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CMF C6 HI3 N UZ

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 27813-02-1 CMF C7 H12 O3

CCI IDS

CM 5

CRN 79-41-4 CMF C4 H6 O2

CM 6

CRN 57-55-6

CMF C3 H8 O2

RN 86166-88-3 HCAPLUS

2N 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, 1,2-propanediol mono(2-methyl-2-propenoate) and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 27813-02-1

CMF C7 H12 O3 CCI IDS

CM 6

CRN 79-41-4

CMF C4 H6 O2

CM "

CRN 57-55-6 CMF C3 H8 O2

IC C08L033-00; C08L025-14; C08F002-28; C08F212-08; C08F220-02;

C08K005-29; C09D003-80

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 35

IT Surfactants

(amine methanesulfonates, for emulsion polymerization of acrylic compds.)

IT 85931-84-6P 86166-86-1P 86166-88-3P 86166-89-4P

(latex coatings, manufacture of, by emulsion polymerization)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L50 ANSWER 49 OF 49 HCAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 1969:439498 HCAPLUS Full-text

DOCUMENT NUMBER: 71:39498

ORIGINAL REFERENCE NO.: 71:7307a,7310a

TITLE: Surface-active copolymers forming in emulsion polymerization, and their role in the process

AUTHOR(S): Eliseeva, V. I.; Kozlov, L. V.; Drezel's, S. S.

CORPORATE SOURCE: Inst. Fiz. Khim., Moscow, USSR SOURCE: Doklady Akademii Nauk SSSR (1969),

DOKIAGY AKAGEMII NAUK SSSK (1

186(1), 128-31 Phys Chem

CODEN: DANKAS; ISSN: 0002-3264 Journal

DOCUMENT TYPE: Journal LANGUAGE: Russian

ED Entered STN: 12 May 1984 AB The stabilization factors for latex of polymers formed by copolymn. of

BuO2CCMe:CH2 or CH2:CHOAc with Me2NCH2CH2O2CCMe:CH2 were studied. The copollymers were prepared with persulfate initiator in aqueous phase without an emulaifier under Ar. The stable latexes were formed only in acid media and a typical electron photomicrograph of such product was displayed. The kinetic data on the progress of polymer formation at pH 5.4-5.8 showed that the surface-active materials of low mol. weight formed in the early stages are indeed polymeric radicals which increase in size with further chain growth, reaching large dimensions and no longer removable by electrodialysis. The kinetic data also showed that the copolymm. in these cases was a 2-step or 2-phase process in which the initial stages produce a water-soluble predominant component in the growing chain, while the latter stages proceed with larger

contribution by the other comonomer. The last stage of the reaction results in new particle formation without consumption of the already existing surface-active particles. The reaction thus starts with formation of polymer radicals enriched by water-soluble component; part of these after reaching a certain size precipitate from solution and aggregate into particles which solubilize both monomers owing to their diphilic nature. Hence the process proceeds in the monomer phase to form the high-moll-weight copylymer. The surface of the latter is stabilized by sorption of the water-soluble surface-active radicals and by its own diphilic nature.

IT 26658-83-3P

RN

(preparation of, kinetics of)

26658-83-3 HCAPLUS

N 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2



CM 2

CRN 97-88-1 CMF C8 H14 O2



CC 35 (Synthetic High Polymers)

IT Surfactants, preparation

(in polymerization of butyl methacrylate with (dimethylamino)ethyl methacrylate)

26658-83-3P

(preparation of, kinetics of)

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=> d his nofile
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L30

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               SEL RN
     FILE 'REGISTRY' ENTERED AT 08:33:48 ON 24 APR 2009
             6 SEA SPE=ON ABB=ON PLU=ON (9003-49-0/BI OR 281198-01-4/BI
                OR 33114-26-0/BI OR 363619-87-8/BI OR 688811-07-6/BI OR
               691355-68-7/BI)
               E DMAA/CN
L3
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               E 2-(DIMETHYLAMINO) ETHYL ACRYLATE/CN
L4
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               ACRYLATE"/CN
               STR
1.6
            50 SEA SSS SAM L5
L7
             5 SEA SPE=ON ABB=ON PLU=ON L2 NOT 1/NC
L8
             1 SEA SPE=ON ABB=ON PLU=ON L7 NOT S/ELS
               E (C8 H16 N O2 . C H3 O4 S)X/MF
             2 SEA SPE=ON ABB=ON PLU=ON "(C8 H16 N O2 . C H3 O4
L9
               S)X"/MF
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L12
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          20368 SEA SSS FUL L5
L13
L14
             5 SEA SPE=ON ABB=ON PLU=ON L13 AND L2
L15
               STR
L16
            50 SEA SUB=L13 SSS SAM L15
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               SAV PEZ196/A L13
               SAV L17 PEZ196A/A
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               OR FIBRE? OR FIBROUS?
T-20
          1618 SEA SPE=ON ABB=ON PLU=ON L18(L)PREP/RL
L21
           114 SEA SPE=ON ABB=ON PLU=ON L20 AND L19
L22
              1 SEA SPE=ON ABB=ON PLU=ON L21 AND L1
               E SURFACTANTS/CT
1.23
        271672 SEA SPE=ON ABB=ON PLU=ON SURFACTANTS+PFT,NT/CT
L24
           245 SEA SPE=ON ABB=ON PLU=ON L20 AND L23
L25
               OUE SPE=ON ABB=ON PLU=ON (BLOCK? OR GRAFT? OR STAR? OR
               BRANCH?) (5A) COPOLYMER?
L26
            17 SEA SPE=ON ABB=ON PLU=ON L21 AND L25
            75 SEA SPE=ON ABB=ON PLU=ON L24 AND L25
L28
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               CREASE PROOF? OR LAUNDER? OR CLEANSING? OR (HAIR? OR
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SKIN) (3A) (TREAT? OR PROTECT?)

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L32		13	SEA	SPE=ON	ABB=ON	PLU=ON	L20	AND L29
L33		29	SEA	SPE=ON	ABB=ON	PLU=ON	L26	OR L28 OR (L30 OR L31 OR
			L32)				
L34		2	SEA	SPE=ON	ABB=ON	PLU=ON	L33	AND L1
L35		13	SEA	SPE=ON	ABB=ON	PLU=ON	L33	AND (1840-2002)/PRY, AY, PY
L36		10	SEA	SPE=ON	ABB=ON	PLU=ON	L21	AND POLYMER?/SC,SX
L37		37	SEA	SPE=ON	ABB=ON	PLU=ON	L24	AND POLYMER?/SC,SX
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			ME:	THACRYLA	TE-HYDRO	XYETHYL :	METH	ACRYLATE-ETHYL ACRYLATE
			COP	OLYMER"/	CN			
L41		1	SEA	SPE=ON	ABB=ON	PLU=ON	363	7-26-1/RN
L42		260	SEA	SPE=ON	ABB=ON	PLU=ON	363	7-26-1/CRN
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L46				SPE=ON	ABB=ON	PLU=ON		3 OR L44) AND L18
L47				SPE=ON	ABB=ON	PLU=ON		AND L19
L48				SPE=ON	ABB=ON	PLU=ON		AND L29
L49		2	SEA	SPE=ON	ABB=ON	PLU=ON	(L4	7 OR L48) AND (1840-2002)/PR
			Y, A	Y, PY				

49 SEA SPE=ON ABB=ON PLU=ON L35 OR L39 OR L45 OR

L50